The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

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The Champion Silver-Lead and Copper

MINING COMPANY (LIMITED).

Registered the 13th November, 1869, under the Companies Acts, 1862 and 1867.

CAPITAL £24,000, IN 2400 SHARES OF £10 EACH.

£1 to be paid on application, and £1 on allotment. Calls not to exceed £1 per share. Three months to intervene between the days appointed for payment of calls.

DIRECTORS.

Sir ROBERT BRISCO, Bart., Crofton Hall, Wigton.
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BANKERS—THE CARLISLE CITY AND DISTRICT BANKING COMPANY.

SOLICITORS—Messrs. S. and S. G. SAUL, Carlisle.

SECRETARY—JAMES LAINTON.

OFFICES,—7, POST OFFICE COURT, CARLISLE.

PROSPECTUS.

This company is formed for the purpose of working an extensive property in the Stewartry of Kirkcudbright, in the South of Scotland. The property comprises many square miles of ground, and is secured from the several landowners on leases of 21 years, at a royalty of 1-15th, with the exception of one small sett, which is held at 1-12th.

It has been worked for nearly two years under tack-notes by a few gentlemen privately, who, after proving the existence of large mineral veins in all directions through the different setts, recently purchased the Creetown, Lachantyre, and Dallash Mines, with the machinery, buildings, &c., belonging thereto, with the intention of forming the whole into one company, and inviting the co-operation of those of their friends who are interested in mining, which is now done with the greatest confidence, the value of the property being beyond doubt.

The capital expended in the purchase of the mines and machinery, and working cost up to this date, has been provided for by the issue of 1200 paid-up shares to the present proprietors, who will also subscribe for a portion of the 1200 additional shares proposed to be issued for the further development of the property.

The report of Mr. John Taylor, jun., of Queen-street-place, London, dated 4th May, 1869, is annexed. It will be observed that his inspection of the property took place prior to the purchase of the Creetown, Lachantyre, and Dallish Mines

The report of Capt. Remfrey, one of Messrs. John Taylor and Sons' agents, is also appended, and particular attention is directed to his remarks regarding the extent of the property, the machinery erected, the work already done, with the discoveries made, and character and value of the ore.

The Portpatrick Railway passes through the centre of the property, and the ports of Creetown and Gatehouse are within easy distance.

A copy of the Memorandum of Association of the company is annexed.

Copies of the Memorandum and Articles of Association may be obtained at the office of the company, and application for shares may be made on the form enclosed with the prospectus, and accompanied by a deposit of £1 per share.

REPORTS.

Sandycroft, Chester, May 4.—I beg to hand you my report upon your mining property in Scotland, which I visited last week. The sett, which is a very extensive one, being nearly 3 miles in length and 3¼ in width, is situated close to the town of Creetown, in Kirkcudbrightshire, bounded to the west by the Old Cairnsmore Mines, and to the south-east by the Creetown Mine. A number of fine masterly lodes are to be seen at the surface at different points, and several of these can be traced for hundreds of fathoms in length through the sett. These lodes are of two different kinds, some running to the north of west and and south of east, but at different angles; and others running to the east of north and west of south. Nearly all the lodes at present discovered are marked and numbered upon the Ordnance Map shown to me by Capt. Hawke; those running north of west and south of east being coloured blue, and the caunter lodes red. About £600 has been expended in trials of a superficial nature at various points on the property. These trials, as far as they have been carried, are very satisfactory, and give considerable promise of future successes. Referring to the lodes marked blue on the map, Nos. 1, 2, and 3 can be traced for a long distance on the summit of Culcronchie hill, running parallel to one another at a distance of 5 to 10 fms. apart. At the foot of the hill in Culcronchie burn they are very plainly to be seen, and here an opening has been made and a level driven about 6 fms. south-east upon the middle or No. 2 vein. In the forebreast of this level the lode is from 4½ to 5 ft. wide, with the walls very clearly defined, underlying about 2 ft. in a fathom to the north-east; and although still so near the surface (the ground rising very gradually above) has already changed in character, and has a very kindly appearance, being composed of quartz with spots of lead ore, and in one portion traces of yellow copper ore. The No. 1 lode is, however, the most promising of these lodes (1, 2, and 3) as seen at the surface, being some 10 ft. wide; but for several reasons it will be advisable to drive upon the No. 2 lode (say) for a distance of 15 or 20 fms., and then put out cross-cuts to the No. 1 and No. 3 lodes. Within a few fathoms of these lodes to the westward, close together in the burn, may be seen the outcrop of the No. 4 lode about 6 feet wide, the No. 5 lode 4 ft. wide, and the No. 6 lode 10 ft. wide. Upon these no trial has been made, as they will be intersected at a considerable depth by the cross-cut driven on the course of the No. 2 caunter lode, to be mentioned hereafter. A short distance from the burn, near this spot, is the outcrop of the No. 7, or spring-water lode, some 50 ft. wide, open and kindly-looking, and from which are bubbling numbers of small springs of water strongly impregnated with oxide of iron. Still further westward a few fathoms we come to the No. 8 lode. Upon this a level has been driven south-east from the burn 5 fms.; the lode is from 4 to 5 ft. wide, very promising looking, and in the forebreast of the level already producing small stones of lead ore. An improvement may be expected very soon at this point. This No. 8 at its outcrop in the burn—where first discovered—is composed of quartz, interspersed throughout with small spots of copper. Close to the mouth of the level it is thrown some 3 fms. to the south-east by a cross-course running at right angles to it. From 70 to 80 fms. to the west of the level, upon No. 8 lode, a cross-cut is in course of driving in a northerly direction towards the No. 2 caunter lode; when this is reached it is proposed to carry forward the cross-cut upon the course of this north-east and south-west lode, and thus intersect all the eight lodes above mentioned, and any others that may not have been discovered at the surface. A considerable distance to the south-west of this cross-cut down the burn openings have been made upon the No. 2 caunter lode, with the object of commencing another level; this should be a very fine trial level, intersecting as it would all the parallel lodes to the north-east of this point at 26 fms. under the cross-cut mentioned above, and unwatering them to a depth of no less than 105 fms. below the summit of Culchronchie Hill, upon which the outcrop of many of the lodes may be seen. The No. 10, or Creetown main, lode has not as yet been seen in your sett, but at only a short distance from the boundary to the south-east. It has been opened upon lately in three or four places, with great success, by the Creetown Mining Company. At the point nearest your boundary at which it has been touched a level has been driven little more than 4 fms. into the hill side, and in the forebreast is to be seen a fine lode, 6 ft. wide, of a very promising nature, with a course of lead ore going down in the bottom of the level worth from 1¼ to 1½ ton to a fathom. The Creetown Mine has been worked for some 10 or 12 years, and some thousands of pounds worth of lead and copper ores raised. Lodes No. 11 and No. 12, as laid down upon the plan, represent the supposed direction through the sett of the Black Craig and Old Cairnsmore lodes. Nothing has been done as yet actually to prove that these lodes do traverse your property, but there is every reason to believe that such is the case, and pits have been sunk near the plantations to the south-east of Cairnsmore House upon their supposed course, and in each pit although the lodes were not seen yet the indications lead me to think that they are at no great distance. The depth of soil is considerable, and for other reasons these trials have been abandoned for the present. The Blackcraig lode is a very large one, being some 40 ft. wide, and large quantities of ore have been raised at this mine during the many years it has been worked; and a fine discovery has only now lately been made in the bottom of the old mine, thus proving the important fact that the lodes in this district are productive at a considerable depth from the surface. At the Cairnsmore Mine, also, the returns of ore were some 60 tons per month, and a fine course of ore was worked in the 110 fm. level; the lode is about 12 ft. wide. The No. 13 lode is to be seen in a cutting upon the railway, close to Culcronchie Bridge. It is a wide, open-looking vein, but at this point much disordered. A small lode, No. 14, parallel to this, was discovered under the bridge in the Burn. We now come to No. 15 lode, the only one upon which a shaft has been sunk in this large sett. The depth at present attained is only 16 ft. from the surface, and the lode here is 5 to 6 ft. wide, composed principally of quartz, and carrying a rib of rich lead ore, nearly solid, from 3½ to 4 in. wide, and some 2 ft. of the lode besides, full of strong spots of ore, worth in one end of the shaft fully 15 cwts. of ore per fathom. The shaft is sunk within 25 fms. of the boundary, and close to the burn, so that it would not be advisable to continue it down as permanent work; but for a trial, with the great promise of improvement that it now presents, it is very important that an effort should be made to sink the shaft, at all events, a few fathoms deeper. This lode, as seen in the burn, a few fathoms to the south-east of the shaft, is 13 or 14 ft. wide, but it is here much disordered, and is not, in my opinion, so promising in appearance as several of the other lodes as seen at the surface. The lode has been proved at two points to the south-east side of the burn, and therefore out of your sett. An effort has also been made to find the lode some hundreds of fathoms to the north-west of the shaft, but the great depth of soil and the influx of surface water rendered this a matter of considerable difficulty during the winter, and the trial was, therefore, abandoned; should, however, the No. 15 lode open out well in the shaft it would certainly be advisable to continue this. The Nos. 16 and 17 lodes have been opened up to a small extent in the adjoining sett to the south-east of your property; so far as they are at present seen both lodes are much disordered, but are fine strong veins, and spotted throughout with mundic, copper, and lead ore. No. 18 lode is also large and promising looking, as seen in the burn; it is from 20 to 30 ft. wide, composed mainly of quartz, interspersed with mundic and small spots of copper. To the south-west of this lode about 60 fms. a level has been driven nearly 20 fms. in a north-easterly direction from the burn, to intersect the No. 18 and parallel lodes. This level will prove all this portion of the sett in a most thorough manner; and, from the number of lodes and strings to be seen in the burn, there is every reason to hope it may lead to valuable discoveries. A very large lode indeed is to be seen in the side of the burn, about ¼ mile from Creetown. A winze has been sunk about 4 fms. upon it, and, although this winze was full of water, I could see from the appearance of the stuff broken there that the lode is a very kindly one, and well worthy of further exploration. Of the lodes marked red on the map, the only one that I saw that appears to be promising is the No. 6; it is 10 to 12 ft. wide, as seen in the side of the hill in the granite, and interspersed throughout with spots of yellow copper ore. Having, I believe, mentioned all the points of note on the property, I will conclude by saying that I consider it to present great promise of success, and with vigorous working at certain points I shall be very much surprised if in the course of a very few months discoveries of value are not made. I would remark that the points I think most important are the driving on the No. 2 lode; this will be an excellent trial of the lodes Nos. 1, 2, and 3. The cross-cut towards the No. 2 caunter lode, to intersect so many of the lodes at right angles; also the cross-cut from the burn below the high road, towards the No. 18 and parallel lodes; and last, but no least, the shaft on the No. 15 lode. I should recommend you by all means to endeavour to get this shaft down, at all events, a few fathoms, to prove the lode, as it appeared to me that the rib of lead ore was becoming stronger as it went down, and was of more value quite in the bottom of the shaft that it was 2 ft. above that point. These trials it would be well to carry on during the next few months with some vigour, as such operations near the surface can be much more advantageously worked during the summer months than in winter. —— JOHN TAYLOR, Jun.

Derwent Mines, Riding Mill, Northumberland, June 30, 1870.—Acting upon Mr. John Taylor's instructions, I carefully examined your extensive mineral property, situated near Creetown, Kirkcudbright. The veins are large and numerous, traversing the trap formation and portions of argillaceous schist, which is more or less associated with the veins.—Champion Mine: The deep adit level cross-cut, driving north towards No. 18 vein, was taken up at the Chain burn, and driven upon a cross vein about 32 fathoms, which had influenced the main vein—so much so, that a part of the vein can be traced on the east side of the level for 2 or 3 fathoms back from the present end, which consists of quartz, spar, spots of mundic, blende, and lead ore, of no market value; a few fathoms will very probably intersect the principal part of the vein. There are eighteen known veins to the north of this level within 2½ miles. The out-crop of this vein where seen crossing the burn is very wide, composed principally of quartz, spar, mundic, &c. The level continued would drain the above veins and high backs. No. 17 vein is also large, containing strong branches of quartz and spar. The most encouraging part is that about 3 feet wide, containing small specimens of nickel, having on the south wall greenstone, and clay-slate partially decomposed on the north.—No. 15: The bearing of this vein is about the same direction as Nos. 18 and 17, being 35° south of east and north of west. The engine-shaft is sunk 10 fathoms upon the vein, capable of receiving large pitwork. At present the water is drained by means of a small water-wheel; should it be found necessary, a larger wheel, 50 or 60 feet diameter, could be put up—say 200 to 300 fathoms down the burn. The present machinery will likely enable you to go down 10 or more fathoms deeper. The 10 fm. level has been driven north upon the course of the vein about 9 fathoms, which produced excellent lead ore, and the present end is promising, yielding nice pieces of ore, with small strings or branches containing spar and spots of lead ore. About midway between this and the shaft, I observed a good profitable vein in the roof of level, and I was told the vein was very productive in the sole. The 10 fm. level has been driven some 4 or 5 fms. south of shaft. The vein here does not present such favourable indications, although it is strong. Ground is being cut for plat and cistern to take up the top water, and hopes are entertained of sinking the shaft without the assistance of pumps. A few fathoms south of shaft, an open cutting 24 fms. in length has been made, and a cross level driven some 9 feet to the vein. Here a winze is sunk, now full of water, 11 feet. The vein I was told is 4 or 5 feet big, composed of quartz, spar, blende, stones of lead, and a little copper ore, samples of which I examined at the surface. About 125 fathoms south this vein is intersected by an east and west vein, hading north towards No. 15 vein. The back of this vein has been laid open for a few fathoms; it is wide, and composed of quartz, spar, and occasional spots of mundic. At this mine I took a sample of dressed ore from a small parcel lying on the dressing-floor, which gave by assay 77 per cent. of lead and 2 ozs. 17 dwts. 4 grs. of silver per ton of pig lead. Nos. 1, 2, and 3 veins have nearly the same bearing, being 36° south of east. No. 1 is a strong vein, showing good spots of lead ore when seen in the burn; between this and No. 2 vein there is a portion of schist, and, I may add, elvan. A day level is driven a short distance east upon this vein composed principally of clay-slate. In all probability the main part is standing to the north. No. 2 shows spots of copper ore at the out-crop on the moor, not far from the burn. The junction of the three veins is said to be east of this point. Nos. 4, 5, and 6 have been proved only by making trenches on the backs of these veins, in which I was told copper, lead, and blende were found in small quantities, but not of commercial value. These pits are now full of water and stuff, so that I could not examine them forming their intersections at the point of junction with the clay-slate and granite, at Culcronchie Hill to the east; No. 4 is 6 feet wide, No. 5 4 feet, and No. 6 vein 10 feet wide. I noticed the out-crop of veins in Culchronchie burn. No. 7, or spring water vein—which may also be termed the monster vein—is said to be 50 ft. wide. It can be seen in places north of the burn, on the Culil estate, where the water is gushing out at several points strongly charged with the oxide of iron.—No. 8: The end of the level upon this vein stands 25 fathoms east of burn. Open cutting 10 fathoms, driven 15 fathoms, good samples of lead and copper, mixed with blende; also the carbonate of lead and copper, lying at surface, near to the entrance of the level, which must be regarded as being very promising looking vein stuff. The vein here is strong and masterly, notwithstanding it has been influenced by a caunter vein, and heaved some 3¼ fathoms to the west. This working is 30 fathoms east of trial shaft, which is sunk from surface 5 fathoms, now partly filled with water. I was informed that the vein is 5½ feet wide at that depth, and judging from the fine pieces of copper ore (yellow, of high percentage) lying at surface, the vein must be a hopeful one, and sufficient to warrant further explorations in depth. The water has hitherto been drawn in buckets. A 10-feet water-wheel is now being erected, which I fear will be found inadequate to prove the veins to any great depth. About 60 fms. west of shaft, at about the same level at random, a day adit cross-cut has been driven 20 fathom north towards this vein (No. 8), and there are about 12 fms. to drive to intersect it; this should be done. This cross-cut was intended to cut No. 2 copper vein, and then to drive on its course to intersect all the other lead veins. In doing this high backs would be attained.—The Deep Adit Level Cross-Cut: Here an open cutting has been brought up for about 12 fms. long, and the level extended from it about 3 fathoms towards No. 2 vein; by driving upon this vein would cut the same veins as the above cross-cut, but come up 26 fathoms below it, and about the same at the engine-shaft. If continued as far as 1, 2, and 3, 45 fathoms, and under the summit of Culcronchie Hill, about 105 fathoms cover would be got. This is a very important trial, and should be carried forward with vigour. There are convenient places for reservoirs and for dressing-floors at those cross-cuts, or day levels.—Dallash: This mine is situated about 5 miles north-east of the Champion Mines, in the slope of a high mountain, and where considerable cover, or backs, can be got by taking up an adit level upon the line of the vein—still, nothing of this mode of mining could have been entertained by the former company. A whim-shaft has been sunk a few fathoms above the base of the mountain, 20 fathoms, and a 10 fm. level driven 6 fathoms north of shaft, and about 3 fathoms south; the bottom, or 20 fm. level is driven north 8 or 9 fathoms, and south about 1½ fathoms. Those places, I was told, produced good pieces of lead ore, and which I saw lying at the surface. The vein which now forms the bed of the burn for some distance is 8 or 9 feet wide, and it has been washed away for a considerable distance of length by the water to a depth of from 15 to 20 feet in one place, leaving both walls of the vein quite perfect to surface. Here the vein does not present very great promise; the vein stuff on the hillocks and about the shaft top has a much better appearance, and judging from this, more especially, a further and more substantial trial should be made. In passing through Blackcraig and Cairnsmore Mines, I noticed that the vein stuff differs in appearance. I am of opinion that the Blackcraig Mine has not been operated upon at Cairnsmore, that is, judging partly from the workings, unless a most rapid bend has taken place, or the vein moved from its regular course by a cross vein of some considerable power, which I think is not very likely. Those mines I believe have yielded from time to time large quantities of lead ore, but with what result I cannot state. Creetown engine-shaft is sunk 11 feet long by 6 feet wide, and is down a little below the 40 fm. level. This mine is drained by a 34-in. cylinder pumping-engine, with 11 in. bucket-lifts, working at a very slow rate of speed, showing the water at this season of the year to be very little indeed. The 40 fm. level is driven on an east and west vein 7 fathoms to No. 2 vein, and 2 fathoms beyond, driven on the latter vein (No. 2) about 8 fathoms north, in which fine lumps of lead ore were taken, some of which are now lying underground. In one place (roof of level) the vein is very productive for about 6 or 9 feet in length, worth (to 1½ ton of lead ore per fathom. In the present end the vein is 2 to 3 feet wide, carrying a small leader of lead ore yielding a few cwts., say 5 or 6, in a fathom, and from its regular appearance and other indications an improvement may be expected shortly. This level (40) has been driven south 6 fathoms. In the present end the vein is unproductive, but a short distance back from the end I broke excellent pieces of solid lead ore from the roof. The 30 is driven east of engine-shaft 9 or 10 fathoms, also intersected No. 2 vein, driven north 25 fms., yielding ore, more or less, the whole length. At times lumps of lead ore weighing 60 to 70 lbs., and a stope in roof of this level 2 to 3 fms. long and 2½ fathoms high, produced good saving work. This level (30) is driven 3 fathoms beyond No. 2 vein towards No. 1 vein, and there are about 30 fathoms to drive to intersect it. The 30 has been driven south on No. 2 vein 6 fathoms, yielding spots of lead ore. A winze has been sunk under this level 9 feet, which I was told produced fine lumps of lead ore, and also on the north side of intersection. This being the case, and the vein having a lively appearance in the roof of the 40 fm. level below, the vein should be at once opened out by raising and sinking at the intersection; and this in all probability would throw open payable or tributable ground. In the 18 fm. level No. 2 vein was reached 20 fathoms east of shaft, and a winze sunk to the 30 fm. level. The distance driven upon the vein No. 1 is 7 fathoms south and 14 fathoms north; 3 fathoms back from north end the vein was very productive for about 3 fathoms long in the roof, which has been taken away. This level (18) has been driven west about 36 fathoms. About 2 fathoms from shaft a north and south vein has been intersected, showing spots of lead ore. This end stands 35 fathoms short of cutting the old Pibble vein from which the former company raised nearly all their ore. This is an important point, and should at once be carried out.—Flat-Rod Shaft: This shaft is sunk 25 fathoms from surface, or 20 fathoms below adit level. The vein was cut at the adit 15 fathoms east from shaft; vein 6 feet wide, driven on its course 6 to 7 fathoms, producing good stones of ore, and very promising, so I was told. Those points are now covered with water; we went through the adit as far as we could get for water. Here the drainage power consists of a very fine wheel, 60 feet diameter, 2 feet 4 in. breast outside, supplied with water from a reservoir just above. This wheel is capable of pumping the water, drawing the stuff, &c.; there is also a large crusher attached. In front there is an excellent site for laying out a good dressing-floor.—New Adit, Creetown Vein: The open cutting is from 12 to 14 fathoms in length, driven upon the vein 10 fathoms, running south of east and north of west. About 3 fathoms from mouth of level a sump is sunk 3½ fathoms; the vein in the bottom I was told is four feet wide, containing orey stuff similar to that now on the dressing-floor, and which is very promising-looking. A few feet south of sump a cross vein was intersected, which disarranged the main or Creetown vein. The level was driven from this point (cross vein) on a part of the vein, carrying on the east wall floorsan and decomposed schist. It appears that the principal part of the vein is standing to the west side of level, and it is probable the same remark may apply to the position of this part of the vein in the sump; however, by stripping down a portion of the vein at the adit will throw some light upon it. I like the character of this vein, also the samples of ore, &c., which I saw on the dressing-floor. This level gains considerable cover as it advances. Several pits or trenches have been made upon the back of the vein, all of which I was told produced mineral.—Railway Cutting: This, as well as many other points, I found to be most interesting. The vein here is very wide, and runs in an oblique direction with the cutting, and contains large quantities of mundic. I think you would not do wrong to test this mundic; besides the vein contains a great deal of decomposed or soft kind of killas and sparry branches. The western wall on the Champion side of the cutting is strong greenstone; that on the eastern wall is strong clay-slate, dipping east, which is the probable inclination of the vein. The ground on both sides of the railway is somewhat flattish, consequently to prove this vein to a satisfactory depth pumping and winding power would be required; still you might be able to sink a few fathoms without machinery, and this would be very desirable.—Lochantyre: This mine is situated 3 to 4 miles nearly due south of the Creetown Mines. The engine-shaft is sunk to a depth of 44 fathoms. The power employed for drainage and hauling the stuff was a 12-horse power locomotive, still standing on the mine with suitable pitwork, 44 fms. 7-in. pumps, rods, &c., in the shaft complete; sunk 20 fathoms perpendicular, where it struck the vein. The 20 fm. level is driven about 7 fathoms north, and the same distance south, strong veins containing spots of copper and lead ores. From this point (20) the shaft was carried down upon the course of the vein to the 44, vein 2 to 3 feet wide, yielding a little copper and lead ores. The 44 fm. level is driven north from shaft 7 to 8 fathoms, vein producing spots of lead ore, though not to value. This level continued would intersect the east and west veins hading towards the shaft—distance to drive 9 to 10 fathoms. This level (44) has been driven south of shaft about 10 fms. in a large quartz vein. There are excellent pieces of lead and copper ores lying at surface. The port of Gatehouse is about 2 miles south of the mine, with a good road leading to it. I need not say that the Portpatrick Railway goes through the Champion Mine setts, and that Gatehouse station is close to the eastern boundary, Creetown station in the centre, and Palnure station within a few minutes walk of the western boundary, and the port of Creetown, Wigtown Bay, close at hand, thus offering every facility for transit of your ores and materials. In conclusion, I would remark that, considering the large extent of your mining field, almost undeveloped, and the number of veins contained therein, all producing mineral more or less, these junctions, and, more especially, their intersections, by which nearly all the explorations can be carried forward, whether driving or sinking upon the course of the vein, must be a great advantage where the workings can be brought to bear in opening and proving the veins; at the same time I would advise for a time to concentrate your efforts to two or three points with much vigour. The following seems to me the most likely—the Creetown Mine, including the new adit on Creetown vein.—Champion Mine: Drive deep adit towards No. 18 vein; sink the engine-shaft, and drive the 10 fm. level, also sink upon No. 8 vein; and lastly, to take up or drive the deep and upper adit levels, if not both, drive the deep adit. These points are deserving a spirited trial, and from what can now be seen, good results we hope will follow. There are other points also worth noticing, which can be taken up subsequently. JOSIAH REMFRY.

FORM OF APPLICATION FOR SHARES.

To the Directors of the Champion Silver-Lead and Copper Mining Company (Limited).

Having paid to the credit of your company with the Carlisle City and District Banking Company the sum of £ , being a deposit of £1 per share, I request that you will allot me shares of £10 each on the terms of the prospectus, and I hereby agree to accept the said shares or any smaller number that you may allot to me.

Name in full .....
Date ..... Address in full .....

BANKERS' RECEIPT.

Received the , 1870, on account of the Champion Silver-Lead and Copper Mining Company (Limited), from the sum of £ , being the deposit made in accordance with the terms of the prospectus on an application for an allotment of shares in the undertaking.

£ ..... For the Carlisle City and District Banking Company.

THE QUEEN, THE KING, AND THE VIRTUOUS LADY—the three richest mines in England for silver, copper, and tin, and the most promising in the world. £20 will, if purchased at once, secure five fully paid-up shares in each distinct (limited) company. The mines have now over £13,000 available cash; and the Queen in the first three months' workings paid a dividend at the rate of 40 per cent. per annum on the capital subscribed. £20 invested at once, I, the undersigned, openly declare, from the present appearances and gradual daily improvements of the mines, is absolutely certain to make £50 within a very short space of time, and the correctness of my assertions will be quickly verified.

Address, Mr. THOS. J. BARNARD, Tamar House, near Tavistock.

This is a thoroughly genuine, *bona fide* advertisement, and Mr. Barnard, whose success in mining is almost unparalleled, will be happy to answer any questions and furnish every particular respecting the above properties. At the VIRTUOUS LADY can now be seen one of the richest copper lodes ever discovered in England; and at the QUEEN a rock of silver ore has been raised to surface, weighing 84 lbs., 20 per cent. of which is pure silver. All I ask of intending investors is—come and see the mines for yourselves. THOS. J. BARNARD.

LA REINE, LE ROI, ET LA FEMME VERTUEUSE—(THE QUEEN, THE KING, AND THE VIRTUOUS LADY)

Les trois mines les plus riches de l'Angleterre (produisant de l'argent, du cuivre, et de l'etain) ont plus d'avenir que toutes les mines du monde. On peut obtenir, au prix de vingt livres sterlings, si l'on achète à present, cinq actions tout-a-fait libres, dans ces trois sociétés anonymes distinctes. Les mines jouissent, en ce moment, d'un actif disponsible de plus de treize mille livres sterlings; et La Reine dans les trois premiers mois d'exploitation a donné aux actionnaires un dividende à raison de 40 pour cent. à l'année sur les capitaux versés. Je, soussigné declare ouvertement d'après l'etat actuel des mines et les ameliorations qui se font graduellement de jour en jour, que les vingt livres versés à present deviendront cinquante livres en très peu de temps, et avec une certitude absolue; et l'exactitude de mes observations sera verifiée sans delai.

Adresser, en anglais ou en français, Monsieur THOS. J. BARNARD, Tamar House, near Tavistock.

Cette annonce est tout a fait vraie sincère et de bonne foi, et Monsieur Barnard, dont le succes dans les mines est presque sans parallele, sera heureux de repondre à toutes les questions qu'on lui fera et de donner tous les renseignements voulus concernant les susdites propriétés. A la Femme Vertueuse on peut voir, à present, une des veines de cuivre les plus riches qui aient jamais été découvertes en Angleterre; et à la Reine une roche d'argent vient d'etre amenée à la surface pesant 84 livres, et dont 20 pour cent. sont de l'argent pur. Tout ce que je demande aux capitalistes qui pensent acheter c'est—de venir eux mêmes voir les mines. THOS J. BARNARD.

MARTYN AND CO.'S SELF-ACTING BUDDLE
(PATENTED).
LICENSES GRANTED by R. MARTYN, CLINTON VILLA, REDRUTH, CORNWALL.

JAMES BUTTERWORTH
MAKER OF ALL THE VARIOUS SIZES OF
VERTICAL AND HORIZONTAL HIGH-PRESSURE STEAM ENGINES.

VERTICAL ENGINES, from 2 to 10-horse power,
HORIZONTAL ENGINES, from 3 to 40-horse power,
FORTY STEAM ENGINES, from 2 to 20-horse power,
In stock to select from, prices low, and ready for immediate delivery.

COLLIERY WINDING ENGINES
Made on an improved principle, up to 40-horse power.

STEAM DONKEY PUMPING ENGINES, from 2 in. up to 12 in., rams properly tested in actual work before delivery.
All made in a good, strong, substantial, workman-like manner, of the best material, and warranted to work well.
Plans, specifications, and estimates furnished upon application at the
ALBERT STREET ENGINE WORKS, MANCHESTER.
ESTABLISHED 1840.

LABORATORY OF ANALYTICAL CHEMISTRY,—4, THE CEDARS, PUTNEY, LONDON, S.W.
ESTABLISHED 1859.
ANALYSES and REPORTS on METALLIC ORES, METALS, &c., daily attended to by Dr. T. L. PHIPSON, F.C.S., Member of the Chemical Society of Paris, &c. Terms moderate.

Original Correspondence.

[ADVERTISEMENT.]

THE QUEEN—THE KING—AND THE VIRTUOUS LADY.

SIR,—Having been attacked by the Editor of the *Globe*, I have answered his leading article; but as it is possible that he may not insert it, I have to request that you will do so in your valuable Journal as an advertisement. THOS. J. BARNARD.

Tamar House, near Tavistock, Nov. 16.

TO THE EDITOR OF THE "GLOBE."

SIR,—My attention has just been drawn to your article in the columns of your Saturday's impression, respecting my advertisement upon what I feel convinced will speedily become three of the richest mines in England—the "Queen" and "King"—and the "Virtuous Lady." Will you, now, kindly repeat this article in print, that I may have an opportunity of showing to the world the correctness of my advertisement.

From the *Globe*, Saturday, November 12th, 1870:—

THE QUEEN, THE KING, AND THE VIRTUOUS LADY.—Such is the imposing—or rather mysterious—heading to an advertisement that appeared yesterday morning in the columns of one of our contemporaries. The advertisement in question reveals one of those characters in life that occasionally fall in the way of some that happen to have been born with the silver spoon of fortune, but are now offered to the public at large through the medium of a newspaper. The Queen, the King, and the Virtuous Lady are, it appears, the three richest mines in England for silver, copper, and tin, and the most promising in the world. We, Mr. T. J. Barnard, of Tamar House, Tavistock, "openly declares" that having invested at once in these mines, is absolutely certain to make 50*l.* in a short space of time, and urges investors to take advantage of his advice, with the assurance that if they do so the correctness of his assertions will be quickly verified. In fact, all he asks—that is, we presume, in addition to the 20*l.*—of intending investors, is to come and see the mines for yourselves. Surely some one of them is anxious to turn 20*l.* into 50*l.* in a very short space of time, perhaps in no time will proceed at once to the vicinity of Tavistock and inspect the "rocks" of pure silver and the richest copper lode in England that are said to be there. It will be hard, indeed, seeing the kindly disposition of Mr. Barnard, as evinced by his advice to his fellow-creatures, if that gentleman is, after all, compelled to invest the 20*l.* out of his own funds, and it may be thus become wealthy, contrary to his inclinations. But somebody will, no doubt, be found sooner or later to avail themselves of the "tempting offer." Should the public hang back at first, though we advise Mr. Barnard to try what effect the offer of a return ticket (first-class, of course) to Tavistock, with gratuitous residence at Tamar House for a few days, will produce. When such a good offer as the one that has already made is put forth, all the details in connection therewith should be on a scale of corresponding liberality.

We presume it is the fate of all public men to have to submit sometimes to very much ridicule from one of the greatest of blessings—the press. Your cleverly-written article, which for satire would have done some credit to the pages of the humorous periodicals, winds up by a suggestion that I should throw Tamar House open for the benefit, I suppose, of all enquirers—the idea is not exactly original even my wandering brain, but I recollect writing some few years since a small school book "Questions of importance require mature consideration," and acting upon the same, I am now fully persuaded that a general invitation to Tamar House would be of more profit to the visitors than the host. However, this is no joking matter, and although I do not give to the public *carte blanche* to pay a visit to Tamar House, the same as the three mines in question, I am only too happy to put you to the test, and prove to the world the correctness of my assertions.

I have great pleasure in giving you, the Editor of the *Globe*, a most cordial and standing invitation to spend three or four days or a week with me at Tamar House; it is one of the most enchanting spots in the county, and would brace and invigorate me for the winter. I am rather delicate myself; however, it does not prevent me from always supplying my visitors with a liberal table. My wine cellar is not moderately extensive for a delicate host; my horses are good, as such valuable mining permits me to indulge in the luxury of good nags, and the best of carriages are at your service in making your visit here as pleasurable as possible. I have extended this invitation to any three mining agents in Devon or Cornwall, to be chosen by you; I care not who they are, so long as they are practical mining men, and managers of any mines in the United Kingdom. You have simply to produce such to me, and they may make sure of a hearty good welcome.

I look but very simple returns for the four of you to kindly blend a little business with pleasure, and accompany me during your little sojourn here to the three mines which seem to have so invited your attention. I shall be most happy to pay your expenses, and, of course, first-class from London to Tavistock, when a carriage shall be in waiting to convey you to Tamar House, a pleasant drive of about seven miles. Your three friends will be treated in precisely the same manner, save that I would not insult you by the offering of money. To them I propose to give five guineas each for the thorough inspection of the mines, and a full and detailed reports upon them. I should require you to insert them free of charge in your paper, good, bad, or indifferent, with your own notes, which, I think, you would make during your visit here, and the thorough investigation of the three mines above and underground. This is a *bona fide* offer, and I prove my sincerity I am open to place 50*l.* in the hands of Mr. Middleton, the proprietor of the *Mining Journal*, as security for the accomplishment of my part. No doubt when we meet we shall have a little gentle spar of words, but, nevertheless, enjoy a pleasant, sociable, instructive day or two together, and, as far as possible, will now formally introduce myself to you. Some seven or eight years since I was possessed of nothing but perseverance and just a limited education, acquired chiefly on the Continent. It was then with great difficulty I could count five sovereigns, and could hardly say bo to a goose. The present result is that by dint of perseverance, a never giving up, and earnest struggling after failure upon failure, I have now success, and have improved so much in arithmetic that I can proceed through the numerals with the greatest ease to a considerable degree, and a spirit of retaliation is so urgent within me that I am almost inclined to indulge at your expense in a little borrowed wit, and remark that it is now no difficulty for me to distinguish at once that I am actually seeing the bo to a goose.

With three of the most valuable mines ever discovered in England, it is my aim and great desire to court every enquiry. I have a great object in view in advertising so openly and strongly, yet truthfully. I will yet prove to the world that England teems with mineral wealth, and am now zealously stirring in that course—grand, profitable, practical results being already arrived at, and before another three years have passed I shall have proved beyond a doubt that English mining is the best investment for money in the universe, and imparts a great benefit, directly and indirectly, to one and all—in fact, and in a word, is the staff of life!—*Nov.* 16. THOS. J. BARNARD.

THE QUEEN SILVER, COPPER, AND TIN MINE.

SIR,—Will you grant me a little of your space to reply to the slurs of "Adventurer" on this mine, in his letter in the Supplement to last week's Journal?

Seeing the prospectus advertised in the Journal sometime ago, I went with some friends to visit the mine. We formed our own opinion of the merits of the property, made investments in it, and certainly we have as yet had no cause—nor, if facts are worth anything, are we likely to have—to do other than congratulate ourselves on the course we took.

First.—The QUEEN is not a speculation—not what *may be*, but what *is*. The profits far exceed the expenditure; *it is a legitimate dividend mine, with a substantial balance at the bankers.* Furthermore, if the mine is already in a position to pay dividends a few months only after the formation of the company, what may be reasonably expected when the engine (now in course of erection) is at work, when the development of the mine will be vigorously prosecuted, and the returns of ore and the corresponding profits will be proportionably increased?

Next, as to the Lodes.—There is one silver lode (a real *bona fide* silver lode), with five others, more or less rich in tin, copper, and arsenic, with a tolerably high percentage of accompanying silver. And here it should be observed that the company are not dependent for dividends on the silver lode. This lode is worth when the writer was last at the mine, about a fortnight since, 150*l.* per fathom (sic) is, of course, a very valuable feature in the mine, and must evidently, of itself alone, yield large profits; but even putting it altogether out of sight, the remaining lodes are sufficient to make a very valuable mine. One of these is now worked for copper and arsenical mundic at and about the adit level (only 40 fms. from surface) for three years, at a good profit, before the formation of the present company for the more effectual exploration of the property. This same lode has been intersected by the present company at 30 fms. from surface, where it is yielding first-class profits; and recently it has again been intersected at 40 fms. depth, where the character of the lode is found to be changed, the copper, which at a shallower depth was the principal feature, giving way to tin. This change is in itself a very valuable improvement; the ore with a high percentage of tin (more than double the average of the mines of the two counties); and the experienced agent, Captain Knott, considers the "proof" thus made at this point in the mine enhances the value of the whole property fully 50 per cent.

Again, we are only waiting for the engine to commence its work, when we shall very soon once more intersect the same lode at the 60 (the shaft being already sunk); and, as it has continued to increase in value with depth, we look upon this point as again augmenting our profits, to be still further increased with increasing depth. But this is not all—this is but *one* lode; and in the meantime cross-cuts will be put out to cut the other *four* lodes (some of which we have already been proved profitable at the adit level), when very much larger returns will be made.

I see, from Captain Knott's report, that the ore from the 40 and the deeper levels will be first treated for arsenic at the arsenical works adjoining; then the silver ore will be extracted by the amalgamation process; and, finally, the main portion, tin, will be set free. Thus, by the aid of science, *three* returns will be made where on the old crude system *one* only would have been looked for. (It may be observed in passing that this application of science to mining, though comparatively little known in this country, is in Germany an established system, even poor ores being there made to yield good profits—in fact, the Germans are in a position to give lessons to other nations in other matters besides the art of war.)

It is, therefore, proved that the Queen will be a dividend mine quite independent of the silver lode; but that this lode will enormously *augment* the dividends is clear to anyone who has been to inspect it. I saw rocks of silver ore, yielding at the rate of thousands of ounces to the ton. At the same time, no doubt, of course, would expect the whole lode to be of this character. Poor ore and rich are broken down together; but the average of the lode will (especially when the amalgamation process is fairly at work) give handsome profits; while as to quantity, the supply is almost inexhaustible. If ores much poorer are made to pay in Germany, why should not this under a process identically the same? Standing on these facts, therefore, I maintain that the Queen is a sound *bona fide* mine, *of great value in the actual present, of brilliant prospects in the near future*, and I claim for it a fair share of attention, as being quite worthy to rank with others, and even to take precedence of many, now in the market. I am myself only a private shareholder—I do not seek to puff the mine, on the one hand, but neither, on the other, am I content to see it attempted to be depreciated by individuals who are either ignorant of the real circumstances or wilfully malignant. I seek only that the mine may have justice, and a fair market value, dependent on its own merits. The managers challenge—nay, *court*—inspection; and it is open to anyone to go (as I have done) and judge for himself, or to send competent agents, in which case I am convinced there would be but one result—that of taking an interest in the property. VERASE.

[For remainder of Original Correspondence see this day's Supplement.]

SATURDAY.—Market very quiet, the dealers being engaged preparing for the settlement. East Lovell, 27 to 28; West Chiverton, 53 to 54; West Frances, 35 to 36; South Condurrow, 3 to 3¼; Tincroft, 46 to 47; Van Consols, 1⅞ to 2⅛; West Maria, 32*s.* 6*d.* to 35*s.*; Tankerville, 14 to 14½; Taquaril, 49*s.* to 51*s.*

MONDAY.—The chief demand to-day has been for Taquaril, which advanced to 52*s.* buyers, upon receipt of a favourable telegram. West Pant-y-Go, Plynlimmon, West Frances, Van Consols, Providence, East Grenville, and West Maria also in demand. Taquaril, 52*s.* 6*d.* to 55*s.*; West Pant-y-Go, 20*s.* to 22*s.* 6*d.*; Plynlimmon, 2 to 2¼; West Frances, 35 to 37; Van Consols, 1⅞ to 2⅛; Providence, 38 to 40; East Grenville, 2¼ to 2⅜; West Maria, 33*s.* to 35*s.*; Parys Mountain, 3¾ to 4; Rosewall Hill, 22*s.* 6*d.* to 25*s.*; Tankerville, 13¾ to 14¼; Grenville, 2⅛ to 2¾; East Lovell, 27 to 28; Don Pedro, 2⅝ to 2⅞.

TUESDAY.—Settling day. Market very quiet, and prices in most cases merely nominal. West Chiverton, 52½ to 53⅛; Great Laxey, 17¾ to 18¼; Cook's Kitchen, 19 to 20; Great Vor, 5 to 5½; East Lovell, 27 to 28; Drake Walls, 22*s.* 6*d.* to 25*s.*; Providence, 38 to 40; Prince of Wales, 11*s.* to 13*s.*; South Condurrow, 2⅞ to 3; Taquaril, 52*s.* 6*d.* to 55*s.*; Don Pedro, 2¼ to 2½.

WEDNESDAY.—Market moderately active for Taquaril, Tankerville, Grenville, East Grenville, Providence, Drake Walls, Kitty (St. Agnes), and West Pant-y-Go. Taquaril, 53*s.* to 55*s.*; Tankerville, 14 to 14¼; Grenville, 2⅛ to 2⅜; East Grenville, 2⅜ to 2⅝; Providence, 39 to 41; Drake Walls, 22*s.* 6*d.* to 25*s.*; Kitty (St. Agnes), 8½ to 9; West Pant-y-Go, 20*s.* to 22*s.* 6*d.*; East Lovell, 26 to 27; Great Vor, 5 to 5¼; Hingston Down, 12*s.* 6*d.* to 15*s.*; Rosewall Hill, 22*s.* 6*d.* to 25*s.*

THURSDAY.—There is very little doing to-day, and prices are merely nominal. East Lovell, 26 to 27; West Chiverton, 52½ to 53⅛; Drake Walls, 24*s.* to 26*s.*; Rosewall Hill, 24*s.* to 26*s.*; Taquaril, 53*s.* to 55*s.*; Don Pedro, 2⅜ to 2⅝; Cook's Kitchen, 18 to 19; Tankerville, 14 to 14½.

FRIDAY.—With the exception of a demand for Plynlimmon, East Lovell, East Grenville, and Kitty (St. Agnes), the market is very dull. Plynlimmon, 2¼ to 2½; East Lovell, 26½ to 27, cum div. 2*l.*; East Grenville, 2½ to 3; Kitty (St. Agnes), 8½ to 8¾; Drake Walls, 25*s.* to 27*s.* 6*d.*; Rosewall Hill, 24*s.* to 26*s.*; Taquaril, 50*s.* to 52*s.* 6*d.*; West Chiverton, 53 to 54; Tankerville, 13¾ to 14; South Condurrow, 2⅞ to 3⅛; West Maria, 31 to 33; Providence, 39 to 41; West Frances, 34 to 36.

THE CORNISH MINE SHARE MARKET.—The arrangements of a heavy settling, and also, probably, the threatened difficulty with Russia, have tended to somewhat restrict transactions, although, even now, there is not much difficulty experienced in finding purchasers of nearly all marketable tin stock at rates which, with one or two exceptions, compare not unfavourably with the previous week's quotations. With money so cheap as at present it is not at all surprising that increased attention should be bestowed on some of our first-class mines, and it is doubtless owing to the existence of a growing disposition to look favourably on speculations which yield such good profits as some tin mines in the county have done for a considerable time past that the share market has expanded into a condition of generally healthful activity.

PENDARVES UNITED.—Everyone connected with mining affairs is aware that for many years this mine has held a strange position, but the adventurers were hardly prepared on Tuesday last for what occurred at the meeting. It appears that the adventurers had been working Sir Richard Vyvyan's portion of the sett without license. Sir Richard Vyvyan's agents, Mr. Shaw and Mr. Fred. Hill, attended the meeting on Tuesday last, and gave notice that as the mine agents were working the setts, giving undue preference to one of the lords, they would not be permitted any longer to work that portion of the sett belonging to Sir R. Vyvyan. This is, indeed, a remarkable state of things. The adventurers have made very extensive outlays during the past few years in developing what is now one of the largest setts in the county, comprising Condurrow and the adjoining setts, now known as Pendarves United. It now appears that the adventurers had not the shadow of a right for working the sett from which a large part of the ores are drawn. How this matter will be terminated can hardly yet be ascertained, but an adventurer informs us that Sir Richard Vyvyan has made up his mind that the present state of things shall no longer exist.

BUYERS OF CORNISH COPPER ORES.—The Ticketing List is still further reduced this week by the expunging of "Freeman's" and "Goole Alum Company." The latter company has not bought any ores for some time, and "Freeman's" has been absorbed by Williams, Foster, and Co. When Sweetland, Tuttle, and Co. entered the list, a few years since, it was No. 15; it is still last on the list, but is now numbered 10 only, the number of copper ore buyers being reduced, nominally at any rate, from 15 to 10. At the Ticketings at Redruth, on the 4th inst., six companies only bought ores.

THE TIN TRADE.—The adventurers in Cornish tin mines are greatly encouraged by the present aspect of the tin market, and efforts are being made to re-work three or four abandoned concerns in the western part of the county. It is well known that the stocks of English tin are very limited: the smelters have for some time been kept going from hand to mouth.—*West Briton.*

Meetings of Public Companies.

MINERS' ASSOCIATION OF CORNWALL AND DEVON.

A meeting was held at the Carharrack Institution, Gwennap, on Tuesday, for the distribution of prizes to those members of the Gwennap branch of the Miners' Association who were successful in the science examination in May. The chair was taken by the Rev. S. ROGERS, the vicar, who is also one of the vice-presidents of the Miners' Association. The prizes were given by the Rev. W. Rogers, and there were also present Mr. R. Green, secretary of the science class, Mr. J. L. Peter, and Mr. J. H. Collins, F.G.S., lecturer of the Association, as well as several ladies.

The CHAIRMAN, in his opening address, bore testimony to the great value of the Association to the working miner, its object being to supply him with the means of obtaining sound technical instruction in the various branches of science connected with his work, with a view to increasing his general intelligence and powers of observation, so as to enable him the better to develope the resources of the country. He briefly described the courses of lectures delivered by the principal and secondary teachers; the field classes, annual excursion, and annual meeting, at which valuable papers are read and discussed, the papers being subsequently printed in the report. Adverting to the prizes about to be distributed, he expressed the hope that they would be but a foretaste of more valuable rewards in the after life of the students. He pointed out that as in the South Kensington scheme medals were given as competitive rewards for the best only, and ordinary prizes, as testifying to a certain standard of attainment within the reach of all, so it was to a very few only that science offered the reward of a happy discovery which would make a man's fortune, but it was to all persevering students that she held out the more solid reward of moderate success, with the happiness of a useful and intelligent fulfilment of the duties of life. He recommended a pursuit of the study of science for its own sake, and referred to Faraday as a man whose ardent love of science brought its rich reward in a happy, useful life, though it never gave him wealth. The Chairman proceeded to point out a few of the recent results of scientific research recorded in the "Quarterly Journal of Science," as likely to be interesting and suggestive, and spoke of iron as being far more scientifically worked in the North than tin and copper in Cornwall; but excused the backwardness of Cornwall on the ground that stratified deposits, such as iron and coal, afford a far more permanent and certain yield than the irregular earthquake cracks which form our lodes. He thought that if mines could combine to prosecute experiments and apply science, more might be done for Cornwall than had been as yet. He referred to Sir A. Brady's process for getting rid of sulphur and phosphorus in iron; and to the statistics of accidents and deaths in the coal fields, which show that in 1869, out of 854 accidents, only 42, and out of 1116 deaths, only 257 were due to explosions. He mentioned the impermeability by water of tin-foil, as fitting it for protecting caustic alkalies and other chemicals, and described a process for tinning iron without melting the tin, which cannot be effected without the presence of an organic substance, such as starch or glucose; and described a mode of separating copper from impurities by galvanic deposit on a plate of copper. Ulrich's work on the Mineralogy of Victoria was referred to, and some new minerals which he mentions. The reverend gentleman described a simple and ingenious mode of producing a gas containing 97 per cent. of oxygen, for illuminating purposes, by shaking up air with water, which absorbs the nitrogen. In conclusion, he recommended the young men present to concentrate their energies on few subjects, and learn them thoroughly; to go over old ground again sometimes, and work with practical experiments, and wished them all success.

The Rev. W. ROGERS then distributed the prizes, some of which were from the Science and Art Department, some from the Miners' Association, and two the kind gift of the lecturer. The following list gives the names of the prizeholders:—Queen's Prizes: Thomas H. Letcher, St. Day; Joseph Edwards, St. Day; Stephen Michell, St. Day; Edwin Hicks, Comford; John James, Chacewater.—Miners' Association Prizes: Frederick Bawden, St. Day; F. O. Harvey, Chacewater; W. J. Bray, Chacewater; John Barnett, Chacewater.—Lecturer's Prizes for an Account of Carclage Tin Mine: Stephen Michell, St. Day; W. J. Bray, Chacewater.

Mr. COLLINS then proceeded to address the audience. He produced a specimen of ore from Old Treburgett Mine, as a most eloquent proof of the value of a practical knowledge of mineralogy. This substance had long been thrown aside as almost worthless. A tributer had sold some blende from the old workings when abandoned, and for a while obtained a high price for it. On examination it was found to be so rich in silver, that mine heaps were sold for 35*l.* per ton, and the very hedges were pulled down and worked over. He referred to the success of a tributer some years since, in the parish of Gwennap, who, by his recognition of the value of a deposit of black copper ore, had made a small fortune for himself, and at the same time greatly benefited his employers. Reference was also made to the recent discovery of pitch-blende at Wheal Owles, and its value as an ore of uranium, as an illustration of the great value of mineralogical knowledge. He remarked that the superior quickness of the Cornish miner too often tempted him to neglect that cultivation of the mind, without which he would certainly be surpassed by others of inferior ability. He announced the success of one of the Association pupils at Camborne, as having gained a silver medal, and stated that five medals had been carried off on various occasions by members of the classes.

Mr. GREEN expressed the hope that even some of those present might not only reap the ordinary reward of study, but make some very valuable discovery. He referred to Sir Humphry Davy's important invention of a safety-lamp, as a Cornish triumph.

Mr. LETCHER, one of the class, a working man, conveyed in very well-expressed terms the thanks of the class to Mr. Collins, and said he deemed himself amply rewarded for what he could hardly call the trouble of attending, by the acquisition of sound knowledge, which enlarged the mind, and gave him a happy interest in so many objects around him. He also spoke very gratefully of the vicar's interest in the class, and of his personal attendance on so many occasions, and strongly advised the young miners present to practise simple blow-pipe analysis, which afforded a very easy and inexpensive method of testing any minerals they might find in the course of their wanderings.

The proceedings terminated by votes of thanks to the secretary and Chairman.

The class for the present year, in this locality, is held at St. Day, and now numbers 20 members.

It would be greatly to the advantage of the miners of this district to attend this class, which meets every Monday evening at 7·30.

Classes are also held at Camborne, Hayle, Breage, Helston, St. Just, and Pendeen, which are at all times open to all members.

The terms of membership for working men are 5*s.* per annum; for mine agents, and others of a superior position in life, the minimum subscription is 10*s.* per annum.

WHEAL KITTY (ST. AGNES) MINING COMPANY.

A general meeting of shareholders was held at the offices, Austinfriars, on Tuesday.—Mr. WILLIAM TEAGUE in the chair.

The notice convening the meeting was read, and the minutes of the last were confirmed.

A statement of accounts was submitted, which showed a profit upon the three months of 1590*l.* The balance in favour of the mine was 2280*l.* 9*s.* 1*d.* The report was read, as follows:—

Nov. 12.—In the new shaft sinking under the 118, the men are sinking by the side of the lode, therefore, it is not of value. In the 118, driving west of shaft, the lode is worth for tin 10*l.* per fathom. In the 118, east of shaft, the lode is worth for tin 7*l.* per fathom; we expect this level will improve as we get away from the crossings we have met with. In the 106, driving west of shaft, the lode is worth 25*l.* per fathom—a kindly lode. In the 106, driving east of shaft, the lode at present is disordered by a small gossan. In the 94, driving west of shaft, the lode is worth for tin 12*l.* per fathom. In the 94, driving east of shaft, the lode is worth for tin 5*l.* per fathom. The winze under this level is suspended for the present, on account of the 106 not being up to it. In the 82, driving west of shaft, the lode is worth for tin 7*l.* per fathom. In the 82, on the old lode, driving west of Holgate's shaft, the lode is producing occasional stones of tin. In the winze sinking under the 82, west of new shaft, the lode is worth for tin 12*l.* per fathom. On the whole, we consider the mine to be quite as well as at any former period, and we shall continue to raise the same quantity of tin as credited this day.—WM. TEAGUE, S. DAVEY, WM. POLKINGHORNE.

The CHAIRMAN moved that the report be received and entered on the minutes, and that the accounts be passed and allowed. With reference to the accounts, he explained that during the quarter a new boiler had been charged, and about 70*l.* worth of copper had been raised which had not been credited; so that, taking the ordinary working costs of the mine, the profit upon the three months' operations would have been about 1750*l.*; and as to the mine, as stated in his report, that continued to look as well as ever.——Mr. KING, in reply to a remark from Mr. LITTLE, stated that upon the suggestion of the manager at the last meeting in Cornwall an additional month's bills were charged.——The CHAIRMAN did not see what advantage would be gained by charging up another month's cost, unless it were to get the discount.

A SHAREHOLDER drew attention to the fact that during the three months 53 tons of tin had been sold, which had realised a profit of 1590*l.* Such a result contrasted most favourably with many mines returning a larger quantity of tin, but without profit to the shareholders. At the same time, it was a tangible evidence of the efficiency and economy of the management.

The report was ordered to be entered on the minutes, and the accounts were passed and allowed.

The CHAIRMAN said that the committee had conferred together upon the ques-

tion of dividend, and were unanimous in the recommendation that it should be 7s. per share, which would leave a balance of 780*l.* to be carried forward to the credit of the next account—an amount equal to about one month's cost.

A dividend of 7s. per share was declared.

A letter was read from the agent of the Duke of Buckingham and Chandos, stating that his Grace concurred with the other lords in granting a new lease of the mine.

The CHAIRMAN, in acknowledging a vote of thanks, stated that he hoped they would never meet under worse circumstances than the present. As far as he could judge, they would be able to maintain their present returns, and he hoped it would realise as good a price for a long time to come.

The meeting then separated.

THE GENERAL MINING ASSOCIATION.

The half-yearly general meeting of shareholders was held at the offices, Old Broad-street, yesterday,—Col. E. W. SCOVELL in the chair.

Mr. J. B. FOORD (secretary) read the notice convening the meeting.

The directors' report stated that the new or revised Articles of Association were finally approved at the extraordinary general meeting, held on August 19 last, and the association is now fully registered as "limited." Under these Articles a much more direct control of the management of the affairs of the association is vested in the proprietors. And it is hoped that this and other changes which have been effected may work for the general benefit. The directors have earnestly addressed themselves to the subject of the current expenditure, with the view of giving effect to the suggestions of the late committee of investigation, and have reduced the office establishments at home and abroad, as well as the number of mechanics, colliers, overmen, and others employed at the mines; the main object of the board being to limit the expenses to a standard proportionate to the amount of business done, rather than incur an outlay in view of a possibly increased demand for coal. The directors have already drawn attention to the expediency of raising money by the issue of debentures for a limited period, and a sum exceeding 20,000*l.* has been subscribed by the shareholders; and the directors trust that as the nature of the security becomes better known and appreciated, such further sums will be subscribed as will enable them to place the finances of the Association upon a more satisfactory and economical footing. The auditors have suggested various modifications in the mode of keeping the accounts, so as to render the same more simple, uniform, and intelligible. Instructions have been sent to the colonial establishments to prepare them for the adoption of a new system as from January 1 next. The shipments and sales of coal during the current year, up to the latest advices from the mines, do not, the directors regret to state, show any increase over the average of the three previous years, taking the corresponding dates, for, although there has been a slight improvement in the shipments from the Sydney Mines, which chiefly supply the British Provinces, there has been a falling off in the demand for both the Albion and Lingan Mines' coal in the markets of the United States. In the circular lately addressed to the proprietors inviting subscriptions to the debenture loan, allusion was made to the exemption of Joggins and Bridgeport Mines from the general hypothecation of the property of the Association as security for that loan. The directors have now to take the sense of the meeting as to the expediency of parting with these properties, and to recommend the confirmation of a provisional agreement, which they have entered into for the sale of the Joggins Mines. In accordance with the provisions of the new Deed of Settlement, the directors have to submit, for the sanction of the proprietors, the grant of the annuity of 350*l.* per annum to Mr. R. Brown, late manager of the Sydney Mines, which grant was, at the general meeting, held on June 21 last, taken for the period ending December 31, 1870.

The CHAIRMAN thought it almost unnecessary to mention why no accounts were presented at the present meeting. There trade was very unequal, little business being done, so that it was unnecessary to prepare half-yearly reports, as in many companies, although it was agreed to hold half-yearly meetings, in order to let the shareholders know the progress of the company's business. There have been certain improvements at the Sydney mines, and yesterday's advices place them in a still more favourable position, but on the whole of the mines there has been a falling off of about 5000 tons during the last year. During the early part of the season much uncertainty existed as to the new tariff of the United States. The final result was that the high duty on bituminous coal was retained, but it was reduced on anthracite. The iron trade was affected likewise in the United States in consequence of the uncertainty of the tariff question. We can now no longer hope for an increase to our profits by a revival of trade to the United States. We have, therefore, decided upon reducing our establishment, so as to meet present demand only. It may appear strange to discharge colliers, but when men are hanging about with partial employment it is absolutely necessary to provide them with means of obtaining a livelihood. Our agent in Halifax has been requested to go the mines and see the orders of the board carried out. We have decided upon one of the managers coming to England to confer with the board. Mr. Hudson will well consider what should be done at the Sydney and Albion Mines, and then confer with us. The Lingan Mines will be broken up, and the Sydney and Albion Mines will be managed as one concern. They are endeavouring to let the offices, so as to reduce office rent, and saleries will be reduced at the commencement of the current year. The London expenses will altogether be reduced about 40 per cent. Our auditors suggested certain alterations in the form of keeping the accounts, and the new principle will be adopted early in the current year. The directors have determined upon a valuation of the property being made in the colony, and the classification of the auditors will be adopted. With regard to the debenture loan, our circular has been responded to partially, and about 20,500*l.* has been subscribed. He thought the nature of the security had not been thoroughly understood by the shareholders. There is much more than security for the 50,000*l.*—the amount represents little more than the plant and landed property, the value of the collieries as collieries not being taken into consideration at all. Their great object was to render themselves independent of colonial bankers; but at present our revenue meets our outlay. They are gradually reducing the banker's debt, and it will soon be extinguished. The necessity of working capital was, he thought, obvious, and he believed that they would be able to retrieve the error of past management in not providing a reserve fund, and he hoped the shareholders would assist them. He concluded by moving the reception and adoption of the report.

Mr. HENRY BOGGS seconded the motion.

Colonel BIGGE had great pleasure in moving the adoption of the report, and congratulated the shareholders upon the way in which Colonel Scovell had acted in the interest of the shareholders.

The report was then put to the meeting, and carried unanimously.

The CHAIRMAN explained that the property secured to debenture holders did not include the Joggins and Bridgeport Mines. The directors think it desirable to part with these mines if favourable terms could be obtained.

Col. BIGGE thought there could be no difference of opinion as to disposing of those mines, but the question was whether the sale should be made by private contract or by public auction. He considered the latter more desirable.

The CHAIRMAN explained that a coal mine was not so readily saleable as second-hand furniture, and that it was preferable to secure the best terms, whether by private contract or otherwise.

Mr. RUDING suggested that any provisional contract of sale entered into should be submitted to a meeting of shareholders before the settlement of the final contract.

The CHAIRMAN feared that if the directors were prevented from concluding a contract it might interfere with the sale.

Mr. WHEELER said that if the sale of the mines would create a competitive company the question should be very carefully considered before passing a resolution for sale.

The CHAIRMAN said they had seventeen or eighteen competitors at present, so that a nineteenth would not materially affect them.

The resolution sanctioning the sale of the Joggins and Bridgeport properties was then put to the meeting, and carried unanimously.

The CHAIRMAN stated that Mr. Beaumont Boggs having heard that the company had determined on selling the mines, he (the Chairman) suggested that the value of the property should be calculated upon retrospective and prospective royalties, and value and interest on plant. The board consider that Mr. Boggs having established himself there, they might be able to get a better price from him than from anyone else. The directors do not think that at 14,000*l.* Mr. Boggs will be getting a bargain. The coal is of very inferior quality, but is used in a trade carried on along the Bay of Fundy, in which Mr. B. Boggs is engaged. He can make it remunerative to him, but the company would never be able to do so.

Mr. SEWELL, as the only director who was on the board when the arrangement with Mr. B. Boggs was made, stated that the Joggins had always been worked at a heavy loss, and Mr. B. Boggs undertook to take the loss off their hands, and by his great perseverance and energy he had been able to create a valuable business, whereby he (Mr. Sewell) hoped Mr. Boggs would be able to pay the company 14,000*l.* before the end of next year.

Mr. A. W. YOUNG, M.P., thought that the more they fettered the hands of the directors the fewer sovereigns would enter their exchequer. The more Americans entered into connection with them the greater would be the chance of revival of free trade with the United States.

The resolution accepting the terms of the provisional agreement was carried.

The grant of 100*l.* for the remuneration of the auditors for the current year, 1870, was agreed to.

The CHAIRMAN said that the next resolution was with regard to the annuity to Mr. Brown, who was formerly manager of the Sydney mines. Mr. Brown retired on the faith of that pension, and the services, moreover, of Mr. Brown are well known. He is also of great assistance to the board, every meeting of which he attends. The Committee of Investigation did not question the expediency of granting it, but merely the mode in which it was granted. As to Mr. Brown's son, he is receiving a lower salary because his father is in receipt of a pension, and is doing more than any manager they had had for the progress of the company. He thought that if any men connected with the company were deserving of consideration it was the managers, who have great responsibility.

Mr. J. E. BRIDGE said that he was responsible for the grant to Mr. Richard Brown, who had spent thirty-nine years in the company's service, and thus Mr. Brown obtained, through his care and foresight, a coal field containing 27,000,000 tons of coal.

Mr. A. W. YOUNG understood that the Chairman had foreshadowed future grants of pensions. He considered it desirable to grant the pension to Mr. R. Brown, if it were only for the services he still rendered.

The CHAIRMAN had intended specially to make it known that he did not agree with the principle of granting pensions.

The resolution was then carried.

Col. BIGGE proposed, and Mr W. D. PAINE seconded, the election of Mr. Ruding.

Mr. LEATHERDALE proposed, and Mr. J. E. BRIDGE seconded, Col. Western.

Mr. RUDING explained that he had entered into the business of making the report *con amore*, with the greatest energy. He feared he had little chance of securing their votes, but he congratulated himself that he was the representative of the independent shareholders.

The names were then put, and the votes were 7 for Mr. Ruding, and 13 for Col. Western.

Mr. RUDING demanded a poll, when it was stated that a large number of the proxies were informal, owing to the stamps not having been marked, in obliterating, with the date of the meeting at which they were to be used.

Mr. RUDING and Col. WESTERN suggested that they should be taken as formal, and each expressed their readiness to abide by the result, but the CHAIRMAN, by the advice of the solicitor, ruled that the informal proxies must be rejected.

Mr. J. E. BRIDGE thought the difficulty would be met if the Chairman stated what would have been the result had the proxies been formal, as he had no doubt the directors had ascertained the numbers.—Mr. RUDING said that he was quite ready to withdraw his demand for a poll, if in the figures published it were shown what amount of support he had received from the shareholders.

The CHAIRMAN then declared Lieut.-Col. William Charles Western duly elected a director of the company, and said that as the matter had now been amicably settled he would be justified in stating that the votes (including the informal proxies, of which there were 303 for Mr. Ruding, and 557 for Col. Western) were ample to elect Col. Western. Excluding the informal proxies, Col. Western was elected. He would further state that, for his own part, he was among the supporters of Mr. Ruding.

A cordial vote of thanks to the Chairman and directors terminated the proceedings.

THE WORTHING MINING COMPANY.

An extraordinary general meeting of shareholders was held at the offices, Bishopsgate-street Within, on Tuesday, when the following resolutions were submitted for the consideration and approval of the shareholders:—That the company be wound-up voluntarily, under the provisions of the Companies Act, 1862; and that Mr. Cyrus Legg, Chairman of the company, and Henry Rendall Wotton, M.D., Deputy-Chairman, be appointed liquidators for the purposes of such winding-up, and the said liquidators be and they are hereby authorised to deal with the property of the company by sale or otherwise, in such manner in all respects as they may deem expedient,

Mr. CYRUS LEGG in the chair.

The CHAIRMAN said the present meeting had been convened to complete what was done some time since, when a resolution was passed that it was desirable the directors should take the necessary steps to wind-up the company voluntarily. Acting upon that resolution, the board summoned another extraordinary general meeting, to alter certain clauses in the Deed of Settlement, in order to bring the company under the Act of 1862, by which they would be empowered to wind-up at a less cost than under the original deed. Relative to the resolutions about to be proposed, all he had to say was that the manager of the bank in Australia had written to the directors, suggesting that, looking at the liability of the company to the bank (about 600*l.*), the Court of Chancery should appoint a neutral liquidator. Before putting the resolutions, which had been drawn up by counsel, he would repeat the regret which he had expressed on several previous occasions that the shareholders had not supported the directors in subscribing a small amount of capital, and thereby averted the step now rendered imperatively necessary. He then proposed the first resolution, as given in the notice convening the meeting.—Mr. ANDREWS seconded the proposition, which was put and carried.

Upon the proposition of Mr. JACKSON, seconded by Mr. MARSHALL, it was resolved that Mr. Cyrus Legg and Dr. Wotton be appointed liquidators.

The CHAIRMAN mentioned that the total liabilities of the company amounted to about 11,000*l.* or 12,000*l.*

A vote of thanks was passed to the Chairman and directors, which concluded the proceedings.

[The Meetings of other companies are published in this day's Supplement.]

A PROGRESSIVE SERIES OF POPULAR LECTURES ON GEOLOGY.—LECTURE V.

Having in the last lecture given some account of the cause of volcanic action, and of the formation of volcanoes, we pass on at once to consider the different forms of Lava, and the reasons why it assumes these forms. In the first place, lava is seldom in a state of complete igneous fusion, but consists of crystals, or granules, in a fused paste, and its fluidity is, in a great measure, due to the steam with which it is permeated. The flows of lava vary very much in extent. We may quote two cases, in the first of which an area of 14 miles by six miles was covered, and in the second an area of 50 miles by 15 miles was covered to a depth of 500 ft. When we consider that the mass of liquid stone in the last instance far surpasses the magnitude of Mont Blanc, we may form some idea of the extent to which the face of the country would be altered, even by an ordinary eruption; and, in such a case as this, the lava would probably continue to flow for more than a year. Owing to the expansion of the elastic vapour in it, lava is often vesicular, or porous, and, when these vesicles, or hollows, are filled up by minerals deposited from the water percolating the mass the lava is called amygdaloid; and when single detached crystals are scattered through a compact base, or large crystals through a fine-grained base, the lava is known as porphyry, and the rock is said to be porphyritic. Lava, also, sometimes assumes a columnar structure, of which the well-known "Giant's Causeway," in Ireland, is a good example. Besides these formations, lava is often forcibly injected into cracks in other rocks, forming what are called "dykes," or walls; and, as we shall find hereafter, the adjacent rocks are very much altered, both in form and construction, by the exceeding heat of the melted lava injected into them. We pass on now to a comparison of the lavas with the igneous or crystalline rocks. To draw this comparison the more clearly, we will refer our readers to the first lecture, in which a list of the simple substances composing our earth's crust was given, and among them we find silicon, magnesium, aluminium, potassium, and iron. We would also remind our readers that a carbonate, silicate, &c., signifies a combination of the simple substance with oxygen, and that silica, potash, magnesia, alumina, &c., are compounds of the corresponding simple substances with oxygen. With this preface, we may state that all igneous rocks, without a single exception, are composed of minerals, which are silicates. These minerals may, therefore, be classed under two great heads—silicates of magnesia and silicates of alumina, the varieties of each resulting from their various mixtures with silicates of potash, soda, iron, lime, &c. The silicates of magnesia, mingled with those of iron, lime, &c., are known as the hornblendic minerals; and the silicates of alumina mingled with those of potash, soda, &c., are known as the felspathic minerals. Of these two classes the felspars are by far the most important, as they form the bases of all igneous rocks, even of those which are known as the hornblendes or angites, because the hornblendic minerals enter largely into their composition, but felspar, in some form or other, is always their basis.

We have thus classed the igneous rocks according to their composition. We proceed now to classify them according to the circumstances of their formation. Here again they are sometimes divided into two classes, known as the volcanic and plutonic (see Sir C. Lyell). This classification is theoretically correct, inasmuch as it divides those formed at the surface, in air or water, from those formed in the recesses of the earth. Practically, however, it is often difficult to say to which of these two classes certain rocks belong. For this and other reasons we prefer to adopt the other method of classification, and to arrange the igneous rocks under three heads—Volcanic, Trappean, and Granitic. We have already shown that volcanic rocks differ among themselves in being made up of different minerals; they also differ very much in texture. Some are crystalline (or granular), some compact, and some glassy. The mineral constituents of the granular rocks are easily determined by simple inspection, while those of the compact rocks may be discovered by chemical analysis. Those which are said to have a glassy texture are divided into the amgydaloid and porphyry, spoken of above, when treating of the different forms which lava is capable of assuming.

Volcanic rocks, or lavas proper, may be classified under three heads—Trachyte, Dolerite, and Trachy-Dolerite. Trachytes are so called from the Greek word "trachys" (rough), because they have a rough, prickly feeling when handled. In appearance they are generally pale-grey or white, though they sometimes assume a dark-grey and nearly black aspect. They are composed principally of a felspar, which is rich in silica, but the different varieties vary both in composition and appearance. The trachyte, properly so called, has either a fine-grained or quite compact texture, a harsh feel, and a cellular appearance. In colour it varies from pale to dark grey, and is sometimes reddish, from the presence of iron. Of the many varieties of trachytes we will only mention two—Volcanic glass, which is the vitreous condition of a trachytic rock, resembling coarse bottle glass in appearance; and Pumice, which is the cellular and filamentous form of the foregoing. Cellular pumice is dark-green in appearance, with less silica than alumina, while the filamentous is richer in silica, and white in appearance. Pumice is, in fact, the froth of lava, and although when powdered its specific gravity varies from 2 to 2½, yet it will float in water, owing to its porous character.

Dolerites or hornblendic lavas are so called from the Greek word "doleros," deceptive. They are usually of a dark green or black colour, becoming brown on the surface, when exposed to the weather. They are generally heavier than the trachytes, containing less silica, and more of the heavier hornblendic minerals. The dolerite itself is of a dark grey colour, and of a granular crystalline structure; and besides the main ingredients, silica, magnesia, and alumina, a considerable proportion of iron and lime enter into its composi
two chief varieties of dolerite are anamesite and basalt.
is only a fine-grained dolerite, so fine grained that its gra
ture is only just perceptible. It forms the connecting li
dolerite and basalt, which is a compact and, to all appeara
geneous black rock. If often contains crystals of hornb
magnetic iron, and is sometimes vesicular or amygdaloidal
this reason that the "Giant's Causeway," in Ireland (alr
tioned), has sometimes been called an anamesite, though
considered to be a basalt. The trachy-dolerites or, as th
called, intermediate lavas do not, from their very nature
any accurate definition. They consist of an almost intima
of the two foregoing species of rocks, the minerals of each
together so that they can scarcely be distinguished. Be
regular lavas or volcanic rocks, there is the volcanic ash,
sists of the ash mixed with fragments of lava ejected from
of a volcano during eruption. This so-called ash often
ceeds in bulk the streams of lava. A tract of country, wi
of 25 miles, has sometimes been covered to a depth of 10 f
lighter ashes may be carried 600 or 700 miles by the wind
gree of consolidation of these materials varies very muc
pends upon the circumstances under which they were ejecte
times they remain loose, and sometimes form a solid roc
are ejected upon land, they may be consolidated either by
weight, or in consequence of the percolation of water de
rain falling with the ashes, or subsequently gaining acce
As an example of this we may say that the ash which fell
laneum was mixed with water, and is, consequently, mo
than that which covered Pompeii. If the ash falls into
becomes consolidated in a manner precisely similar to the
cally-formed aqueous rocks already treated of, and ofte
fossil shells. We must leave the consideration of the tra
granitic rocks to the next lecture.

A MODEL MINING COMPANY.

The position of the working man, in spite of difficulties
over-zealous friends, is daily engaging a larger share of pu
tion, and calling forth efforts and sympathies more in
with the importance of the subject. At the Paris Exhibiti
special attention was called to the relationships between
workmen, and a prize was instituted, to be conferred o
which possessed the best arrangements for promoting th
and moral welfare of their men. The Commissioners of
tion awarded the grand prize of 10,000 frs. to La Vieille
Company, Belgium. Notwithstanding its confessed impo
subject excited singularly little interest in England. In
the contrary, there has been a manifest improvement i
relations of masters and men. Our attention having bee
this marked development in favour of the working class
recent visit to the mines and metal works of Belgium, we
review the various arrangements for the benefit of the
the mines and foundries of La Vieille Montagne Company

The entire working staff of this society is 6000, of wh
women. Of these 1000 possess houses or land: 5200 can
and do arithmetic. The average age of the entire staff i
2800 are bachelors. The families of these workmen rais
of persons living on the salaries of the company to 19,000.
salaries paid last year amounted to 5,657,034 frs. The ave
per day in 1854 was 1·83 frs.; in 1864, 2·36 frs.; and fo
2·62 frs., showing an increase in 15 years of 43 per cent.
improvement in salaries is due chiefly to the extension
originally applied only to the furnacemen, by which
ances, called "primes," are given to the workmen, co
nearly to our term "commission" on the work produced
ciety seeks to encourage and remunerate industry in th
of manual labour, and the application of intelligence t
of the workmen. With this object, a certain fixed sum
salary, and in addition a supplementary amount is paid,
name of "primes," which is dependent on the quantity
the excellence of the workmanship, and the economy re
employment of fuel and the other articles of consumpti
primes call forth the zeal, watchfulness, and skill of th
The amount of primes, as well as the regulations on wh
pend, necessarily vary with the kind of work and its
portance, the full particulars of which are placarded i
and workshop. One-half the primes is paid to the wor
the ordinary fortnightly salary; the other part is carried t
of each artizan, and paid over at the end of the year.
primes now obtained by the workmen amounts to 13 per
salaries; and so well has the system worked, that the
crease of 43 per cent. is attributed to its influence.

Applied originally to the smelters of zinc ore, this metho
gradually extended to nearly every department of labour i
and mines. In the smelting-houses a weighed quantity
of a known percentage, is delivered to the workman.
quantity of metal is fixed, and for every kilogramme of
this quantity which the smelter may be able to extract a
is payable. On the other hand, a maximum quantity
crucibles is allowed for the smelting of the ores, and an
effected is similarly recompensed.

In the rolling-mills a minimum weight of sheets to be
stitutes the day's salary, and every excess above this amou
a prime, which is to be further multiplied by a certain figu
to each variety of sheets, representing the relative difficul
facture; so that a man who turns out 20 kilogrammes ex
of a certain quality and difficulty gets as much as anot
complishes 60 kilogrammes extra of commoner or thinner
the mines the application of this principle is more difficu
accomplished in a manner more or less perfect by fixi
mum quantity of work according to the nature of the ro
ness, and other circumstances. The basis of calculat
primes in the ore-dressing operations is the quantity o
dressed, and its percentage of metal. Similarly, in other
of the company, the primes depend on the quantity de
economy in matters of consumption, and the degree of p
the work. Should the minimum production not be attai
maximum expenditure of fuel surpassed, the workma
loses the augmentation, but is charged with a correspon
tion from his previously earned primes. All the regulati
ing these primes, as well as those relating to the intern
discipline of the establishment, are printed in the variou
spoken by the workmen—French, German, Flemming, &
workman admitted is furnished with a copy of the rules

In the matter of the moral elevation of its working po
Vieille Montagne Company has endeavoured to aid, by b
annual grants, the exercise of the various forms of religio
by different portions of the immense staff. At Moresnet
pany gave the ground and one-third of the building ex
large Roman Catholic church, and at the same time h
contribution and a free grant of the necessary land in th
of a Protestant church; and in a similar manner, at othe
their operations, the company has contributed to the su
services of religion, without distinction of creed.

General and elementary education has received a lar
attention. In the German establishments the Government
fulfil all that is desirable in compelling and providing fo
instruction; but in Belgium the company has establis
schools, and contributes to their support. With the ob
senting counter attractions to the publichouse, variou
institutions have been founded, such as harmonic societ
music, rifle associations, archery clubs, &c. All these
and the national and other *fetes*, are systematically fos
company, and when necessary subsidised.

Dwellings for the workmen have formed the subject o
regulations by the society. Near large cities, such as Li
the recent improvement in the dwellings of the labouring c
has been little need for any action on the part of the co
in less populous districts the society of La Vieille-Monta
a large number of houses on the most approved sanitar
These dwelling-houses, built in groups of two or four (
has a wholesome horror of living in one of a long row),

garden ground attached. These, and other houses purchased pany in large numbers, are let on easy terms to the work- every inducement is held out to enable each one to become ner of his own home. The rentals for a bachelor's domicile m 24 to 36 frs. per annum, and for a family dwelling from frs. Certain restrictions are placed upon the tenants; they ed to observe a code of sanitary regulations, and not to en- lodgers any but the society's workmen, nor turn the dwell- publichouse. Baths and lavatories are provided for the in connection with many of the establishments, and, in sea- ceptional dearness of food, butchers, bakers, and grocers' e been established, but these are at once discontinued when o longer exists.

he sick, the injured, the aged, and the bereaved, a most suc- isse de succours" has been established. The income of this y, which amounts to 300,000 frs. per annum, is derived— fted contribution from the workmen of 3 per cent. on their ; a sum equal to half that amount granted by the com- fines, interest on investments, and donations. The expenses iety are incurred under the following heads:—Medical aid d to all workmen and their families in sickness or accident; es are made to those unable to work, by reason of accident e; and to widows and children when left destitute; and, elp is granted in all the varied evils to which the working able, in cases of loss by fire, theft, of funerals, &c. The af- his caisse are administered by a committee composed of the eneral of the company, of the chiefs of each department, legates chosen by the workmen. A sub-committee manages s of each department, and decides on each separate case. ffices are honorary, and the annual *resume* of accounts is d to each member. To give some idea of the magnitude erations of this friendly society, we subjoin the particulars rking for the year 1869. The receipts from the contribu- the workmen were 177,079 frs.; the subsidy from the com- 109 frs.; and the interest on investments, 34,005 frs., being upon 722,743 frs.; the total receipts amounted to 297,967 frs. ses of sick allowances were 47,240 frs.; medical attendance, 0 surgeons, 74,775 frs.; baths, hospital subscriptions, &c., total of expenses to 145,006 frs.

mpany has also organised a savings' bank, allowing 5 per erest. In 1867 there were 288 depositors, with a total amount its of 193,855 frs. This arrangement has already been of rvice in promoting habits of economy among the workmen, bling many of them to become the proprietors of their own We may fittingly close this notice by quoting an excerpt from rt of the Commissioners of the Paris Exhibition, in confer- La Vieille Montagne Company the grand prize of 10,000 frs., had been offered to the firm which had done the most to pro- e material and moral welfare of their workmen:—"Besides forts, the establishment of a spirit of general order and lity, the maintainance of their wives at the domestic hearth, ations between directors and men, characterised by the long of services, and the good understanding; such are the merits place the Society of La Vieille Montagne in the front rank manufacturing and mining companies, for whom it is a title ur that they promote, without censing, the well-being of their es, and maintain between the workmen and their chiefs an and constant union."

FOREIGN MINES.

RENA UNITED.—Capts. Roberts, James Mitchell, Nov. 10: e Mine: The end driving north, in the 55, yields 5 tons of ore per fathom, . of gold per ton. The 46 end, driving south, 3 tons per fathom. 1 oz. Boundary: In the winze sinking below the 20 the lode is somewhat ed by a change of ground; now yielding 4 tons per fm., worth 10 dwts. The 20 end, driving north from this winze, 6 tons per fathom, 12 dwts. Peschiera: The winze sinking below the 46 yields 5 tons per fathom, ts. per ton. The 33 end, driving north on No. 2 lode, 3 tons per fm., dwts. per ton. The stope in back, behind this end, is improved; now tons per fathom, worth 1 oz. per ton. The 33 end, driving north on 2 tons per fathom, 16 dwts. per ton.—Surface: We have commenced ast from the upper or new water-course down to the old one. With gement we shall, in case anything goes wrong with the head of the ourse, be able to draw water from the new leat into the outer part of st, and on to the Peschiera pumping machinery.—Val Toppa: No. 2 he lode in the driving north from No. 3 cross-cut yields 12 tons of ore m, worth 15 dwts. per ton; and a winze sinking behind this end 10 tons, dwts., and a rise in back 9 tons, worth 18 dwts. per ton. The lode has n improved in the end driving south from No. 4 cross-cut, yielding 6 tons ton, worth 12 dwts. per ton, and bids fair for further improvement.—Cox: The ends driving north and south from second cross-cut west are ame as last week. The rise on the side lode yields 8 tons per fathom, ts. per ton.

ETNA.—Nov. 9: Canada Incosa: In the 120 cross-cut, north en's shaft, we have intersected a branch which lets out water freely; a rial will be made. The ground continues hard for driving through in west of the above shaft. At the 110 east, the lode being small and un- ore, the men are put to open the north side, to prove a branch standing The lode in the 100 west is small, producing ⅛ ton of lead ore per fm., ground is hard for driving through. There is no change to notice in the ng driving south of Henty's shaft at the 80 fm. level. In the 50, east of ico shaft, the lode is strong, and of a promising appearance, yielding per fathom. The lode in the 60, east of this shaft, consists of calcareous arts, and lumps of lead ore, and yields of the latter ¼ ton per fathom. west the lode still yields ¼ ton per fathom. In the 90, east of Addis's e lode is large and strong, and produces occasional stones of ore. The de 80, west of Lowndes's, is compact, and opening fairly productive tri- ound, worth 1 ton per fathom. At the 70, east of Santo Tomas shaft, the ng small and poor, the driving is suspended.—Shafts and Winzes: In winze, below the 70, the ground is hard, and the lode rather small, yield- ton per fathom.

In Callejon's winze, under the 110, the lode is not so ore as it was; its present produce is 1 ton per fathom. In Aviyar's under the 110, the lode has become quite unproductive, and we shall push to the 120 as fast as possible.—Los Salidos: The lode in the 100, west os Amigos shaft, is slightly disarranged by a hard bar of granite; ¾ ton ton is extracted. The 90, west of Buenos Amigos shaft, has opened a ength of ore ground in the past month; the lode is not quite so good as it ton yields 1¼ ton per fathom. In the 75, west of San Carlos shaft, the lode ed into two parts, each of a productive and kindly appearance, and pro- tons per fathom. The lode in the 110, east of Morris's engine-shaft, is and quite unproductive. At the 100, east of Cox's shaft, a good length e lode was driven through last month, worth 2 tons per fathom. The st of San Pablo shaft, is opening a great length of splendid tribute ground, ing 1¼ tons per fathom. The lode is very compact and moderately easy ning through in the 25, east of Palgrave's shaft, and yields 1¼ ton per ; but in the same level west the lode is small, and somewhat disarranged, ding 1½ ton per fathom.—Shafts and Winzes: The sinking of Buenos engine-shaft under the 100 is resumed by six men, and will be pushed on as possible; the lode yields ¼ ton per fathom. In Castelar's winze, under the lode is rather small, worth 1 ton per fathom, and the ground hard ring. In Simon's winze, below the 90, the lode is small at present, but ely will improve shortly, the lode being rich in the level under it. In Jura- winze, under the 100, the lode is rather small at present, yielding ¼ ton ches. The tribute department yielded a good quantity of ore in the past ; and many of stopes at Salidos are looking well at present, enabling us ease the raisings for November at 400 tons. The machinery and all sur- erations are going on very regularly.

RES.—Nov. 9: There is no improvement in the lode in the level, driving west of Warne's engine-shaft. The end of the 75, driving of Crosby's engine-shaft, continues unproductive. A good length of tri- ground was opened by the 65, driving west of San Francisco's shaft, dur- past month. The lode is small at present, yielding 1½ ton of ore per fm. and 55, driving east of San Francisco shaft, having passed through the ore ground, and entered the hard bar of sterile ground known to exist part, are temporarily suspended. A winze will be run through from the ove it. In the 55, driving west of San Francisco's shaft, the lode is ding in value, and produces but ½ ton of ore per fathom. In the 45 fm. st of San Francisco shaft, the lode contains stones of lead, but not in value. The lode is small and poor in the 25, east of San Francisco We expect to get Crosby's shaft (now sinking below the 75) through to this month. Very good progress has been made during the past month San Francisco shaft, sinking below the 65, although the ground is hard. winze, below the 55, is deep enough for the 65, and will soon be holed by reaching it. No. 174 winze, sinking below the 65, is a new winze started om of the 66, west of San Francisco shaft, in the best part of the lode, ill be got down to a 75 as fast as possible, when ends will be driven east rom the bottom of it; the lode is compact and good, yielding 1 ton per fathom. We estimate the raisings for November at 275 tons.—ross Mine: We are uncertain about the lode in the end of the 55, driving of Taylor's engine-shaft. We have suspended the driving while a winze through from the 45 to prove it. The 55, driving east of Taylor's engine- producing ½ ton of ore per fathom. The 45, east of Taylor's engine- holed to Addis's shaft, and has opened very good tribute ground during ast month, and yields 1½ ton of ore per fathom. The lode in the 45, driv- east of Taylor's engine-shaft, is large and strong, with good stones of ore, ning to 1 ton per fm. In the 45 cross-cut, south of Cox's shaft, the ground ard for driving. A branch has been intersected in the 32 cross-cut, of Cox's shaft, but being of no value the cross-cutting south will be con- The lode in the 32, driving east of Addis's shaft, is very wide, composed of carbonate of lime and lead ore. In the 32, west of Henty's shaft, the unproductive at present. The 32 fm. level, driving east of Henty's shaft, ning a run of fairly productive ground, and is producing 1 ton per m. In the 32, west of San Carlos shaft, we are driving on a south branch, consists of a decomposed granite and lumps of lead, and yielding ¾ ton of lead ore per fathom. In the 45, west of San Carlos shaft, the ground is hard for driving, and the lode is small at present. In the 43, east of San Carlos shaft, the lode is of a more open and promising appearance than it was. The 32, driving east of San Carlos shaft, is in old works which had gone below the level; old workers had large quantities of ore at this point, and left parts of the lode standing in places worth 2 tons per fathom. At Taylor's engine-shaft, sinking below the 55, the pitwork is well arranged, and the shaft will be got down to the next level with great speed. Cox's shaft, sinking below the 32, is completed to the 45, and a cross-cut being put out to the lode. Addis's shaft, sinking below the 32, is holed to the 45; the lode is of a promising and productive nature, giving 1¼ ton per fathom. Giles's winze, sinking below the 33, is going down in fairly productive tribute ground, worth ¾ ton per fathom. Castillano's winze, sinking below the 45, is a new winze started to the west of Taylor's shaft, and is in advance of the 55 end.

ALAMILLOS.—Nov. 9: In the 5th level, driving east of San Rafael shaft, the lode is at present unproductive; the lode in the same level, driving west of San Rafael shaft, is strong, yielding ½ ton of ore per fathom, with some good stones of lead. The lode has lately failed in the end of the 4th level, driving west of Martin's shaft. In the 4th level, east of La Magdalena shaft, the ground is hard for driving, and the lode is small and unproductive. In the 5th level, driving east of San Enrique shaft, the lode is large, composed chiefly of calcareous spar and lead ore; it produces ½ ton of ore per fathom. A cross-cut is being put out in the 6th level, east of Taylor's shaft, in a northerly direction for the purpose of intersecting La Magdalena lode. A good length of ore ground has been driven through in the 6th level, driving west of Taylor's shaft, the lode is at present poor. In the end of the 4th level, driving west of San Yago shaft, the lode is improving, and has a very promising appearance; it gives ½ ton of ore per fathom. In the 3d level, east of San Victor shaft, the main slide is in contact with the lode, which it greatly deranges; the production is ½ ton per fathom. In the 2d level, driving east of San Carlos shaft, the lode is split into small branches, and has become unproductive. In the 2d level, east of Addis's shaft, there has recently been an unfavourable change, but it is again improving, and gives 1 ton of ore per fathom; there is also an improvement in this level driving in a westward direction from Addis's shaft; it gives like the other end, 1 ton per fathom. A great improvement has taken place in the end of the 3d level, driving east of Crosby's shaft; this end is passing under a great height and length of untried lode; it is producing 1¼ ton per fathom. The lode is improving both in appearance and value in the 3d level, west of Crosby's cross-cut; it gives ½ ton per fathom. In the second level, east of Swaffield's shaft, the lode has become small and irregular, yielding but ½ ton per fathom. In the 2d level, west of Swaffield's shaft, also the lode is somewhat unsettled at present, and gives ½ ton per fathom. The men are getting on very slowly with Taylor's engine-shaft, sinking below the 6th level. In San Francisco shaft, sinking below the 4th level, very little progress was made during the past month. We are obliged to look out a new party of men for La Magdalena shaft, sinking below the 5th level. In Morris's shaft, sinking below the 2d level, the lode is improving; it yields ¾ ton per fathom, and has a very promising appearance. The men are making rapid progress in Crosby's shaft, sinking below the 3d level; they extract ½ ton of ore per fathom. Cox's shaft, below the 3d level, is being sunk in an inferior part of the lode to keep the shaft vertical; it produces ½ ton of ore per fathom. Luis's winze, sinking below the 5th level, is going down in a strong and productive lode; it gives 1 ton per fathom. The men are making great progress in Tello's winze, sinking below the 2d level; it gives ½ ton of ore per fathom. In Horno's winze, sinking below the 2d level, the lode is of no value. In Roque winze, sinking below the 5th level, the lode is very large, open, and easy to sink through. The tribute department yielded the average quantity of mineral in the past month without undergoing any change worthy of remark. The surface operations throughout the mine and the machinery are going on very regularly. We estimate the raisings for November at 250 tons.

RHINE.—Captain Garland, Nov. 14: Schmelzer: We have commenced to drive a cross-cut from Henty's shaft towards the parallel lodes, which are known to exist in this ground at a depth of 17 fms. from surface, leaving 1½ fm. below the level for a sump. Although the water has not in any degree lessened, we shall be able to keep it sufficiently low for the men to drive with our present means—winding with barrels—sunless it increases materially. I hope, indeed, we shall find no difficulty in mastering the water till the lift of pumps, which have been ordered, are ready and dropped. This will be important, as we shall not get our pitwork for some seven weeks, and during that time we hope to cut the Toni, and be near the Schmelzer lode. We cannot be far from the Toni lode, 4 or 5 fms. at the most, and, therefore, we shall soon intersect it, when I trust I shall have good news to tell you. We shall not make rapid progress till we have cut the plat, and got clear of the shaft. I have ordered a 9-in. drawing-lift at the Frederick Wilhelm's foundry, near Siegburg.—Marienfruede: The winze men are employed in cutting out some ground for the hand-pump, which will be delivered on the mines in about three weeks, and in trying one or two points in the old adit level. The driving of the south-west level is discontinued, the lode having become small and unpromising.—Adele: In the south-east exploratory level from trial shaft there is nothing new to report. The ground continues fair, and is being driven through at about 31s. 6d. per fathom, by four men. Last month 6⅔ fms. were driven, at 26s. per fm., by four men.

[For remainder of Foreign Mines, see to-day's Supplement.]

MINING NOTABILIA.

[EXTRACTS FROM OUR MINING CORRESPONDENCE.]

Camborne, Nov. 17.—The Mining Market during the week has been dull, and prices of all stocks have declined, owing in part to unfavourable news from Russia and France, and a drop of 3*l.* in the standard for tin. The principal dealings have been in East Lovell, East Pool, Cook's Kitchen, Tincroft, North Crofty, Rosewall Hill and Ransom United, South Carn Brea, and West Frances.—At EAST LOVELL meeting, yesterday, a dividend of 2*l.* per share was declared. They have charged four months' cost against four months' returns, and paid 90*l.* against a steam-whim. After these were paid, with the dividend, they have carried forward to the next account a credit balance of 233*l.* The agents' report was considered good, and the prospects of the mine for the future look permanent.—TINCROFT shares have receded from 46½ to 44½, owing to the drop in the tin standard; the mine looks quite as well as for some time past.—NORTH CROFTY is said to be improving for copper, with an enquiry for the shares at about 32s. 6d.—ROSEWALL HILL shares are about 25s., firm; the prospects of the mine are very encouraging.—SOUTH CARN BREA is daily improving; the lode in the shaft is opening well, both for tin and copper.

Some influential parties having joined the TERRAS MINING COMPANY, and secured the few remaining shares the promoters desired to part with, notice has been sent to those who had the power of disposal not to sell any more for the present. On Wednesday another tin lode was cut in the deep adit; it would be premature to say anything of its value for a few days, as the directory wish no exaggerated reports to be circulated. The stone-breaker was placed on the mine on Saturday last, and is being fixed; the new engine will be delivered on Thursday next, and all the works are being vigorously pushed forward. The sales of tin on Friday, Nov. 11, was 3¼ tons, at 72*l.* 10*s.* per ton. The next sale, in December, is expected to be somewhat in excess of it; the returns will now gradually increase as the machinery is being perfected.

COOK'S KITCHEN.—From the improved position and prospects this mine is well worthy the attention of capitalists, especially as being bounded on the west by Dolcoath, and on the east by Tincroft. The cutting of Duukin's lode in the 244, leaving high ground nearly the length of the sett, also greatly tends to enhance the value of the mine. In addition to the important discovery referred to on Dunkin's lode, there is an improvement in the western part of the sett, which sent the market price about six months ago up to 26*l.* per share. A level has been driven in the 210 and 222, a winze nearly down, and they expect during the present month to lay open a valuable part of the mine, which will enable them to increase the returns of tin; the benefit of which, since the considerable outlay in perfecting the dressing-floors, &c., must before long give the adventurers increased dividends.

RHYDTALOG (Silver-Lead).—This property has lately been visited by a large party of London proprietors, accompanied by their agents, amongst whom were Messrs. Williams, Roach, and Thomas. The inspection proved satisfactory. The new lode, which will shortly be intersected at a depth of 15 fms., was opened on at surface, and found to contain lead of considerable value, a sample of which was forwarded to the company's offices in London. The manager reports that there is a continuation of the course of silver-lead in sinking the engine-shaft.

WEST GODOLPHIN.—The pumping-engine having been at work for a few days the water is rapidly falling, and is expected to be in fork next week. The carbona, from which very large quantities of tin have been raised above the deep adit, on south lode, is the first point to which attention is being turned, now that it can be followed below the deep adit. Many other points of interest and value will be proved and laid open during the next month. The price of shares is rapidly advancing, but the shareholders may confidently expect a much greater rise during the present year. In consideration of the company's expenditure in machinery, the lord has consented to a reduction of the royalty from 1-15th to 1-20th.

NORTH ALLT-Y-CRIB MINE.—The lodes at this mine are gradually improving as they enter the hill, as will be seen from the agent's reports. Many applications for shares being made from the district of the mine and throughout Wales, the mine generally is taking a first-rate position among mining people in the district. No mine, save the Van, seems to have opened out so rapidly in value, which the ore at the surface fully corroborates.

THE ROYAL POLYTECHNIC INSTITUTION, AND THE WAR.—On Wednesday evening we witnessed an entirely new and very correct illustration, by dissolving views on a large scale, of all the most interesting scenery, places, incidents, and personages which have become prominently noteable during the pending war, with the addition of glimpses of the most romantic portions of the Rhine and the Neckar. The war portion of these representations were accompanied by, of course, a most able lecture, delivered with his usual distinctness, by Prof. Pepper, with copious extracts from the accounts by the eye-witness and able war correspondent of the *Gaulois*. The "second part" of the entertainment gives more than life-size copies of the paintings of the romance, or "horrors of war," now being painted for the Emperor of Austria, and are of great artistic merit. Diagrams and sections of the ill-fated English war-steamer, Captain, with explanations of the cause of the sad catastrophe, and full-size views of the most powerful pieces of artillery recently constructed, including the metrailleuse, helped greatly to intensify the interest with which the crowded "house" of scientificals and of ordinary sight-seers received and applauded every tableaux. The lecture was accompanied by music, by the Praegen family and Mr. Suchat Champion. The former gave the "Wacht am Rhein," the "Vaterland," the "Marseillaise," &c.; and the latter, among other songs, the "Death of Nelson," which was most deservedly encored. The whole entertainment concluded with a beautiful representation of Napoleon's grave in St. Helena, and the ghost of the great Emperor rising from his tomb, apparently disturbed by the threatened fate of his dynasty. Altogether, both parts of the performance will each furnish a highly instructive and delightful means of spending an evening.

Mining Correspondence.

BRITISH MINES.

ABERDAUNANT.—H. Francis, Nov. 17: We have now about 20 tons of ore ready for market. The deep adit continues to yield ore in paying quantities. The mine continues to look generally very promising. We are still tramming out stuff from the deep adit, and the work on the dressing floors continues good.

ASSHETON.—W. Johns, W. Tipton, Nov. 15: The sinking of Lindow's engine-shaft has been suspended for some time past, in consequence of an increase of water, the same being too powerful to be kept to any advantage. We are now busily engaged in attaching a line of flat-rods from Margett's engine to this shaft, which we hope to complete and set to work by the end of the current week. The lode in the deep adit level south is not producing any lead ore to value. A stope in the back of this level is worth from 15 to 20 cwts. of lead ore per fathom. There is no change to notice in any other part. After the line of rods to Lindow's shaft is completed, which is the most important point at present, we shall commence to lay out the dressing-floors, &c.

BALLACORKISH.—Capt. Trewren, Nov. 12: In the cross-cut, driving east at the adit level, towards King's lode, the ground at present is of much the same character as for some time past, and the water is increasing. In the end driving north of the Dowk vein, at the 12 fm. level, the lode has improved in size, being 14 in. wide in the bottom of the level, looking very promising, and producing some good work for blende, spotted throughout with lead ore, and letting out more water. We shall urge this level with all speed so as to get under the run of ore ground gone down in the bottom of the adit level some few fathoms in advance of this spot. In the cross-cut driving west of the engine-shaft, at the 36, the ground continues the same as in my last.

BEDFORD CONSOLS.—Capt. Andrews, Nov. 8: This mine is situated on the banks of the Tamar river. The stratum is a metalliferous killas, and an elvan course running through the whole length of the sett parallel with your lodes, which is a good feature. On the summit of the hill there is a 24-inch engine, which can be adapted to any purpose you may require it for—stamping, drawing, pumping, or crushing. You have also levels driven over 200 fms., where you have over 50 fms. of backs high and dry, and deeper levels can be brought in—say, 100 fms. deep; this is all on the copper or south lodes. Your chances of success at these points are very good. Now to the tin lode, which is 12 feet wide, all open to surface, and can be worked like a quarry, all high and dry; nearly 600 feet high. I find you have a cross-cut put out 35 fms. north from the copper lode towards this large tin lode, and I should say 15 or 20 fathoms more driving will intersected 50 fms. deep; if this lode is cut good you have a mine good enough for generations, if tin keeps at its present price of 80*l.* per ton. This lode will yield 6 cwts. per fathom where it is open at surface—that is, for the width of the lode (12 feet).

— A. Murray, Nov. 12: I hope the report I sent you is satisfactory. There is no doubt that many samples will produce from 100 lbs. to 200 lbs. of tin per ton of lode, but Capts. Parsons and Collom quite agree with me, from the assays we made, that 28 lbs. would be a capital average for such a bulk of material. On my return next week I will give you a sketch of the mine, as I did the other very hastily.

— George Rowe, Nov. 15: I have been much engaged all this day and yesterday in making various assays, some of which in company with Capt. Mitchell, who has now left this mine with a bar of tin which I extracted from some vans, made by myself and son, also by Capt. Parsons, in the presence of Mr. Murray and Capt. Collom; consequently, there can be no mistaking the presence of tin, and I think it is good metal, which you can judge for yourself. I have a duplicate stone and sample, which any person can see.

— J. Mitchell, Nov. 16: I beg to inform you in the middle adit level cross-cut south, towards the engine-shaft lode, there is no particular change to notice, the ground being still of a highly mineralised character. In taking off another piece of heading from the back of the north tin lode, east of the workings, the lode was not so large near the surface, but in stoping it down we find the lode opening out very fast as it goes down, and yielding some good tinstuff; the lode has a very fine appearance, and I would strongly recommend the north cross-cut, which has already been referred to, to be pushed on to intersect this lode as fast as possible. We are now busy breaking the loadstuff for the stamps, which when dressed will fully prove the value of the lode.

— Capt. Mitchell, Nov. 17: I have been spalling some of the tinstuff, and find by assay that it produces 3 cwts. 1 qr. 21 lbs. 8 ozs. of tin to the ton of stuff; this is an enormous produce. If it will yield on the average 28 lbs. to the ton of stuff it is quite good enough, the lode being 12 ft. wide, and all open to surface; and levels can be brought in 600 ft. deep from the River Tamar.

BEDFORD UNITED.—J. Phillips, Nov. 17: Operations are continued by the side of the lode in the shaft, and in the different levels, except in the 90 fathom level end west. The lode in this level is 4 ft. wide, at present worth from 6 to 7 tons of ore per fathom, and still looking well. There is no change to notice in any of the stopes. We have commenced driving east on the Delvo's Kitchen lode, from the cross-cut, or adit level.

BLAEN CAELAN.—John Evans, Nov. 16: The lode in the 10 still continues to produce a large quantity of lead ore, worth from 30 to 35 cwts. per fathom, and improving every foot we drive; the lode is 6 ft. wide, and much harder than in the level above; consequently, the progress is rather slow. The 25, or adit east, is improving, producing good stones of blende and lead ore, and looking promising for further improvement, and I believe that we are not far off from another good bunch of ore in this level. No change in any other part of the mine since last report. We have had very bad weather the last four days, heavy snow and frost, which was against the masons progressing fast with the buildings; we think, however, to have the engine boiler in between the walls by to-morrow.

BLAEN CAELAN.—Thomas Kemp, Nov. 17: I have to-day been over this mine, and beg to hand you the following report:—The part of the lode which is being opened on by the 10, below adit, is looking exceedingly well, and producing quite 35 cwts. of lead ore per fathom. This level has to be extended about 4 fathoms further east to get under the richest part of the ore we have now standing in the level above. The engine-shaft below the 10 is down about 2 fms., and all possible dispatch will be used to get it down another lift. The part of the lode carried by the end of level, east of adit, is at times producing good stones of ore; we are, for dispatch, driving on the soft part of the lode, leaving whatever extra width of lode there may be standing on the south side. This level will, as you know, by-and-bye come into the main, or straight adit, and thus much facilitates the discharge of stuff from the mine; there may be 30 fms. yet to open to effect this communication, therefore we let nothing interfere with its progress. After we have cut the lode in the main adit we can help to effect this desirable outlet from the ore ground by starting a level west from the said adit to meet the other drivage. There is no change in the straight adit. The ground at the cross-cut north from the level, east of adit, is without material change; it is composed of blue slate, intermixed with spar, and spotted with lead ore. The north lode, which was discovered at surface carrying good stones of lead ore, has not yet been seen underground, but I expect to reach it by this cross-cut very soon. With regard to surface works, the boiler is now fixed in its place, and the masons are getting on with the buildings (engine and crusher-house) as fast the weather will permit.

BLUE HILLS.—S. Bennetts, A. Gripe, Nov. 12: The sinking of the engine-shaft below the 66 progresses satisfactorily. In the 66, both east and west of Letcher's, no lode has been broken since last reported on, and the ground in each end continues much the same. The Wheal Betsy lode, in the 13 cast, is worth 5*l.* per fathom; and in the same level, west of cross-cut, it has improved during the week, and is now worth 15*l.* per fathom. The stope above this level is worth 12*l.* per fathom. Two of the tribute pitches are also improved—one in the bottom of the 40 and another in the bottom of the 50, therefore the mine, on the whole, is looking better than we have hitherto seen it. The 66, north of Letcher's, has been resumed.

BRONFLOYD.—Thomas Kemp, Nov. 17: No. 3 shaft, North Lode: The cross-cut south from the 84 west is through the hard bar, and the ground in the fore-breast is now composed of blue slate intermixed with lead ore, and, according to dialling we have about 6 ft. further to extend this level to get under the point of the winze now sinking under the 73. We hope to communicate the two points in a very short time. The lode in the winze is much the same as for some time past, producing a mixture of ore. The rich ore went out of this winze about 5 fms. below the 73 on its dip west. The stope under the 62, to the west of winze, is worth fully 2 tons of ore per cubic fathom. The stope in the back of ditto is worth 30 cwts. of ore per cubic fathom. The stope in the back of the 62, to the west of winze, has improved, and is now worth over 2 tons of ore per fm. Tribute pitch in back of 52 is producing 15 cwts. of ore per cubic fathom. In the cross-cut south from the 40 west, we have cut a joint carrying flookan; whether this will prove to be the south wall of the south lode I cannot as yet say, but we shall continue on the cross-cut to prove it. As instructed, I have put two more men to this bargain.—No. 1 Shaft, South Lode: The men have completed their bargain, which was one of 10 fms. I have set them an additional fathom to sink for 15*l.*, which will make the depth of shaft 37 fms., or 11 fms. under the 26. When completed we shall open a level on the course of the lode with all possible dispatch.

BUDNICK CONSOLS.—John Rawlings, R. Hill, Nov. 17: The lode in the end of the 23 is about 1 ft. wide, composed of quartz and mundic, and very promising for tin. The carpenters are making good progress in covering over the dressing-floors. We sampled again on Saturday last, the 12th inst.; a parcel of tin, which realised 76*l.* per ton. This mine is well known to have been a very rich one for tin. In the last working the average price of tin was not more than 50*l.* per ton, and now it is 76*l.* per ton. We hope to have an engine erected very shortly, when it will prove for itself that the proprietors have a good and lasting dividend mine for years.

BWADRAIN CONSOLS.—R. Northey, Nov. 15: The lode in the 55 fm. level driving west is about 3 ft. wide, of blende and spotted with lead ore, and letting out much water, promising an early improvement; we have yet several fathoms to drive to get under the ore ground gone down in the level above. In the same level east the lode is from 2 to 3 ft. wide, principally made up of killas, quartz, and impregnated with lead ore. The lode in the 45 fm. level west is 1 ft. wide, and daily improving in character. The lode in the deep adit at Dolfawr is without change since my last. The stopes throughout the mine are yielding the average quantities of lead ore per fathom. We sampled 30 tons of lead ore on the 5th instant.

BWLCH CONSOLS.—R. Northy, Nov. 15: The lode in the 70 is without material change since my last. We have passed through the cross measures, and the lode at present is 2 ft. wide, worth 10*l.* per fathom, and daily improving. The stopes in back of the 70 are worth 1 ton of lead ore per fathom. The new stope in the back of the 60 is worth 15 cwts. per fathom.—North Lode: We have commenced to drive east on the lode at the 40 fm. level; it is 3 ft. wide, and of a very promising character. All the stopes throughout the mine are yielding their usual quantities of ore, except the stope in back of the 40, which is not quite so productive. I see no change in the 30 fm. level to notice since I last reported. We sampled 30 tons of lead ore on the 11th instant.

CARDIGAN BAY CONSOLS.—Chas. Williams, Nov. 17: No change since my last report—crushing being proceeded with satisfactorily.

CAEGYNON.—Nov. 10: The men that were sinking the engine-shaft have left their contract, and nothing has been done in this bargain since Saturday last.—North Lode: The 50 to drive west of cross-cut by six men, at 14*0s.* per fm. The lode is improving, and producing good stones of lead ore. The same pare of men have a bargain to cut down a piece of ground behind the end to enable them to put in tramroad, the lode having heaved to the north, which caused a turn in the level; price of the above work 5*l.* 10*s.* To stope in back of the 50, east of No. 1 winze, by four men, at 70*s.* per fathom; lode worth 12 cwt. of lead ore per fathom. To stope below the 40, east of No. 1 winze, by four men, at 55*s.*

per fathom; lode worth 10 cwt. of lead ore per fathom. I shall remove this pare of men to stope west of winze as soon as the 40 is cleared of stuff, where we shall break some good work. To drive the 40 cross-cut south by two men, at 105s. per fathom. We have met with some part of the lode in this end, which is producing a little lead ore, and more lode south. To drive the 30 east by four men, at 90s. per fathom; lode small and poor at present. The adit cross-cut to drive north in the eastern part of the mine by two men, at 80s. per fathom; ground composed of clay-slate and lode. The 50 to drive south of the south lode by two men, at 100s. per fathom; ground clay-slate and bunches of spar. We shall soon have 50 tons of blende clean and ready for market, which can be sampled when you think proper.

CAPE CORNWALL.—R. Pryor, John Davey, Nov. 15: During the past week the 100 fm. level cross-cut men have been engaged in putting in air-pipes, in order to improve the ventilation, therefore there is but little change to notice since our last report, with the exception of branches of spar having made their appearance, which indicates our being near the lode. The lode in the 100, driving east of cross-cut, is 15 in. wide, producing some good work for tin.

CAPPAGH.—Wm. Thomas, Nov. 14: In the rise in the back of the 24, west of skip-shaft, north lode, the lode is 3 ft. wide, consisting of quartz and gossan, mixed with rich ore. In the cross-cut north in the 24, east of skip-shaft, the end is wet, which indicates our approaching the lode; this cross-cut is being driven with the view of intersecting the lode already discovered in the cross-cut west of the shaft. The stope in the back and bottom of the 64, west of engine-shaft, is producing good ore, and also the stopes in the back of the 84 and 74, west of skip-shaft. We have put in penthouse, &c., in the 74 at the skip-shaft, and in the course of the week we shall have cleared up the shaft under this level, and be ready to begin sinking; and judging from the manner in which the shaft was sunk below the 94, it having been carried from 16 to 18 ft. long, it would appear that there is a good lode going down. I am advised that the plunger-pole, H-piece, &c., will be shipped this week, and when they arrive we shall fix a plunger-lift from the 64 to the 94 previous to sinking the engine-shaft on the course of the lode below the 94.

CEFN BRWYNO.—Jas. Paull, Nov. 15: Saturday last being our setting-day, &c., the following bargains were let:—The 92 fm. level to drive west, by four men, at 155s. per fathom; the lode is 5 ft. wide, worth 1¼ ton of lead ore per fathom. The stope over this level, 60 fms. east of shaft, by four men, at 52s. 6d. per fathom; the lode is 4 ft. wide, and will yield 10 cwts. of lead ore per fathom. The 80 fm. level to drive west, by four men, at 150s. per fathom; the lode is large, showing spots of lead ore, but not sufficient to value at present. The stope over this level, 25 fms. west of winze, by four men, at 65s. per fathom; the lode is 6 ft. wide, worth 12 cwts. of lead ore per fathom, and about the same quantity of blende. The stope over the same level, 15 fms. west of winze, by six men, at 60s. per fathom, in which the lode will produce 14 cwts. of lead ore per fathom. The winze below this level, 50 fms. west of shaft, by six men, at 240s. per fathom; the lode is large, and the portion being carried is producing some good ore, but the main part is left standing to the south, it being easier to sink on the north. This winze is down 7 fms., water very quick, which, of course, lessens the speed of sinking, and we find that we have yet to drive about 11 fms. at the 90 to reach under this point; however, a communication will be effected as quickly as possible. The stope over the 54 fm. level, east of engine-shaft, is let to four men, at 70s. per fathom; the lode is 5 ft. wide, producing 18 cwts. of lead ore per fathom. We have had a breakage at our crushing-mill, which has impeded our dressing a good deal; however, it is now repaired, and works well, and fair progress is being made towards another sampling.

CEFN CONSOLS.—C. Mansbridge, E. Evans, Nov. 17: We have driven in the 9 this week 6 ft., and raised therefrom 35 cwts. of lead. This lode is dipping fast towards the north and south lode, and is improving as we progress. The men recommenced work on the north and south lode last Monday; the lode is looking very promising, and we have raised some rich stones of lead from it to-day. The new shaft on this lode has been sunk 5 ft. during the week. In the Pen-y-Cefn level we have driven 5 yards this week, and find the lode improving in character the further we drive on it, but it produces only a small quantity of lead as yet. All other operations are going on satisfactorily.

CHIVERTON MOOR.—George E. Tremayne, Wm. Bennetts, Nov. 16: The shaftmen are making good progress in sinking Harris's engine-shaft below the 105. In the 105 cross-cut, driving south of the shaft, the ground is at present spare for driving, being mixed with branches of spar; this we regard as only temporary. The lode in the 95, east of the cross-cut, is 4 ft. wide, composed of quartz, flookan, mundic, and lead, and will produce of the latter 8 cwts. per fm. West in this level the lode is 3 ft. wide, similar in character, and worth 3 cwts. of lead per fathom. There are three stopes in back of the 85 east, which are worth on an average 15 cwts. of lead per fm. In the 75 west a winze sinking below this level, the lode is 3 ft. wide, worth 17 cwts. of lead per fm. There are two stopes in this level, each worth 16 cwts. of lead per fathom. The pitwork and machinery are all in good working order.

CRENVER AND WHEAL ABRAHAM UNITED.—William Kitto, William Thomas, William J. Paull, Nov. 15: Sturt's Engine-shaft: The sumpmen will finish cutting down the ground, in order to bring down the kibble to the 190, by to-morrow morning. We shall at once begin to clear the levels east and west of shaft at the 190, preparatory to our dropping the bucket-lift below.—Pelly's Engine-shaft: The lift is dropped down, and has left the 200 dry, which has been an important object, and from our inspection to-day, and the samples of tinstuff brought up by the agent, has proved equal to our expectation. The sumpmen will have to cut ground in order to drop the lift below this point, which will require at least 3 fms., in order to cut ground for cistern and bearers for fixing a plunger-pole at this level. It will take a month from this time before we shall be able to describe to you the value of the tin ground at the 200. There is nothing new to report in our other tutwork operations. We have sampled to-day 252 tons of copper ore.

EAST BOTTLE HILL.—J. Eddy, Nov. 16: South Cross-Cut: We have now four men driving this end; the price for driving and sending all stuff to surface is now 90s. per fathom; we shall drive on this end as fast as we can, in order to see the south lode as soon as possible.—The 12 fm. Level East: This end is now driving by two men, at 60s. per fathom, takers to pay all cost; the lode in the present end is 2 ft. wide, and producing saving work.—Shallow Adit East: This level is now driving by two men and two boys; price for driving 25s. per fathom. The lode in this end is about 2 ft. wide, and producing tin—a very promising lode. By continuing on this end we shall in a little time get to the junction of killas and granite; at this point we have every reason to expect a good lode. We have four men working on tribute in back of the 12 fm. level, and east of Williams's shaft, and breaking good work for tin; they are making good wages.

EAST CARN BREA.—J. Rodda, Nov. 16: The lode has not been taken down in the 90, east or west of Buckley's shaft, since last reported; the ground in each end is easy for driving, and good progress is being made towards the shoots of ore driven over in the level above. The lode in the 80 west is worth 2 tons of ore per fathom. The ground in the 60 fm. level cross-cut, north of the old engine-shaft, is unaltered. Our sampling of copper ore is computed at 65 tons.

EAST PHŒNIX.—J. Seccombe, Nov. 11: The 170, to drive west on the course of the lode, by six men, at 18*l.* per fathom; lode worth 20*l.* per fm. for tin. The cross-cut to drive north from the 170 west, by six men, at 25*l.* per fm.; the ground now in the end is a mixture of very hard capel and granite, but from its appearance I expect we shall soon be in clean granite, and be enabled to make better progress. I have set the tin-leavings at 9s. in 20s. In the trial shaft the lode is regular and well defined, and of a promising character.

EAST POOL.—W. S. Garby, J. Maynard, J. Hosking, Nov. 14: Great Lode: The engine-shaft is sunk 1 fathom below the 180, and the sumpmen are now engaged in cutting a plat below that level. The 180 is driven east of the cross-cut 4 fathoms, and is worth for tin 25*l.* per fathom. It is also driven west of the cross-cut 4 fathoms, and is worth for tin 25*l.* per fathom; this level is still free from wolfram. The 170, east of cross-cut, is worth for tin 18*l.* per fathom. The 170, west of cross-cut, is worth for tin 12*l.* per fathom. There are four stopes in the back of this level, two of them worth 20*l.* and the other two worth 18*l.* per fathom each stope. The winze opposite the engine-shaft, below the 170, is down 6 fathoms, and is worth for tin 20*l.* per fathom. The 160, two fathoms east of the eastern cross-cut, is worth for tin 8*l.* per fathom. The 160 is driven south of the western cross-cut 15 fms.; still in granite, and very hard. There are two stopes in the back of the 160, east of the engine-shaft; one of them worth 20*l.* per fathom, and the other worth 15*l.* per fathom. There is also one west worth 12*l.* per fathom. The 150 is driven 13 fathoms south of the lode, but no other branch yet intersected.—South Lode: The end driving west from the eastern winze is holed to the stope west of the cross-course, which is now worth for tin and copper 20*l.* per fathom. Two stopes in the bottom of this level, west of the cross-course, are worth for tin and copper 25*l.* per fathom each stope. The small steam-engine at this level is erected, and we hope to get it to work in about a week; also to resume immediately the driving of the 130 fm. level east.—Pryce's Lode: The winze sinking on the course of this lode, 35 fathoms east of the western boundary, is 15 fathoms below the 130, and is worth for copper 8*l.* per fathom.

EXCELSIOR.—G. Rickard, Nov. 16: The driving of the deep adit cross-cut south towards the lode, is progressing very satisfactorily; the ground in the present end is still of a favourable description for the production of mineral, and we look forward to the intersecting of the Wheal Thorn lode, which will be fully 40 fathoms from surface, with great confidence as to the results.

EXMOUTH.—John Cock: The deep adit end south is still hard and poor, but we are daily expecting an improvement in the ground and lode. The shallow level south is hard and poor, but here also we are expecting an improvement. The cross-cut east has been repaired during the last month, and driven several fathoms; water is still coming from the breast of the end, and from its appearance I believe we are approaching another lode. There is a good lode in the north end of the east cross-cut, which has the appearance of opening out some good ground. The tribute pitches throughout the mine are promising to give the men good wages. Ore dressed on the mine 50 tons of blende and 20 tons of lead. The water rather slack. The dressing-floors are full of ore. The levels, railways, machinery, &c., are in good condition.

FEWD.—John Paull, Nov. 17: The engine-shaft is down perpendicularly from surface 35 fms. 3 ft., and cross-cutting south at the 35 commenced by six men, so that both lodes may be seen at this depth as early as possible. About 10 fms. have to be driven, and this we estimate will take eight or nine weeks to accomplish. At the 23, east of shaft, the lode is very large, and having driven several fathoms forward on the north side, we have put six men to cut down the whole of the lode to the present end before driving will be resumed. The lode here is of the most promising character, yielding 1 ton of lead and 10 cwts. of blende ores per fathom. At the 23, going west, we are still driving on the north part of the lode to get under the winze coming down from the level above without delay. So far as seen the lode here is orey, and when taken down to its full width we believe will turn out good lead ore stuff. The winze from the 10 is being sunk by six men, and carried down on the north wall of the lode, and we expect will be communicated with the 23 in four weeks' time. When this is done we can put on several more men to stope away ore ground. The lode in the stope under the 10, east of old shaft, is producing 15 cwts. of lead ore per fathom, and at the stope in bottom of the same level, west of shaft, the lode gives the same yield of lead ore. Dressing operations go on regularly, and the next parcel of lead ore will be ready for market before the end of December.

FLORENCE AND TONKIN.—Wm. Verran, Nov. 17: There is no change of importance to report in any part of the mine. We are pushing on the different points with all possible speed, and hope to attain satisfactory results. We expect to be able to effect a communication between the deep adit and the level below in less than two months from this date, which will give us good air in the western part of the mine, and enable us to stope away the ground between the two levels at a much greater advantage than it could possibly be done at present. In the levels driving south on the lead lode, at the 45 and at the 35, there is every indication of having large quantities of that mineral when further away from the copper lode. We are preparing a parcel of copper ore to be sampled on the 25th instant.

FRANK MILLS.—J. Cornish, F. Cornish, N. Addems, Nov. 16: There is no change in the appearance of the lode or the character of the ground in the 145 south. In the 130 north we are driving a cross-cut east, but we have not yet reached the lode; the ground is good, and from its very favourable appearance we hope to meet with a productive lode. There is no change in the rise in the back of the 100 south to notice. We are now driving the 100 north on the course of the lode, which is looking well, and yielding fully 1¾ ton of lead ore per fm. In the cross-cut west from the 84 south the ground continues good, and the end is frequently crossed by small branches of blende, with occasional spots of lead ore. In the 45, driving south from the west cross-cut, on the west branch, north from Orchard air-shaft, the part of the lode in the end will yield ¼ ton of lead ore per fathom. This cross-cut is being continued still further west, where we are passing through productive branches, with the prospect of more being in advance. We have no improvement in any of our stopes or pitches since the last report, and there is no increase yet in the supply of water for dressing purposes, but if any difference there is a slight falling off.

GAWTON COPPER.—George Rowe, Geo. Rowe, jun., Nov. 12: King's engine-shaft is in course of sinking with a full pare of men below the 95; the ground at the present is a little better for progress. At the 95, east of said shaft, we are cutting into the capels of the lode, which is producing strong mundic, intermixed with yellow copper ore. The ground in the rise going up in the back of the 95 west is without any change in character, and good progress is being made. The lode in the 82 east is over 6 ft. wide, yielding occasional stones of ore. The lode in Nicholls's stope, in back of the same level, is worth 7 tons of ore per fathom. Simons's stope, in back of the 82, east of Craddock's winze, is worth 6 tons of ore per fathom. The 75 east is producing stones of ore. The lode in the winze sinking below this level is looking well, yielding 5 tons of ore per fathom.

GORSEDD AND CELYN LEVEL.—Nov. 17: Coetia Gelynen Shaft: The twelve men that were set to scuttle the adit level between this shaft and Coetia Eithin have completed the bargain, by which means an immense quantity of sludge has been carried off by the water; we have still some of the hard stuff at the bottom to clear out, which I anticipate will be completed by Saturday evening, when we shall commence on the fall at 191 yards from the shaft, which is a slight one, judging from what I saw yesterday, as the water is running freely under it, so a short time will remove it; six men will continue here, and the other six will go upon the re-opening eastward. The walking shaft will be finished at Coetia Eithin shaft on Saturday.—Waen Shaft, Lower Vein: We occasionally intersect small joints dropping into the lode, which leads me to think that we are approaching the north and south lode.

GREAT FRON FOWNOG.—W. Wasley, Nov. 17: Since my last report we have cleared and secured the Day level, so that it is now all right up to the present end, which is only about 1 yard from the new engine-shaft. We have started very successfully the pair of 15-in. engines, with drawing-drum, steam-capstan, pumping gear, &c., all of which are working first-class, and I hope now to be able to go on with speed in sinking the new shaft. We have ordered a new 85-in. cylinder engine, with three boilers, from the Messrs. Williams's Perran Foundry, Cornwall, which I expect will be ready to work by the time we are deep enough to put in the 24-in. plunger-lift to pump to the Day level, so that no time will be lost in opening up the mine as fast as possible.

GREAT LAXEY.—R. Rowe, Nov. 15: The sinking of the main engine-shaft below the 220 is going on steadily and rapidly; the lode continues to be worth about 60*l.* per fathom. The 220 north and the sump sunk from the 210 are communicated, and we expect now to make good progress in laying open the long run of rich ore ground standing just immediately ahead of the 220 fathom level end. The lode in the 210 fm. level end is 6 ft. wide, and continues to be worth 100*l.* per fathom. Owing to the immense quantity of water still flowing from the 200 fm. level end we are unable to carry any part of the lode; we have therefore, brought the men back 10 fms. from the end, selecting the dryest spot to cut through the lode, and so far as we have reached find it worth 70*l.* per fathom. In the 190 we have holed to a sump sinking from the 180, which affords the required ventilation, as well as laying open new ground for stopes. The driving of the 190 fm. level end was resumed on Monday. The 180 fm. level end is worth 60*l.* per fathom; and the part of the lode we are driving on in the 165 is worth 50*l.* per fathom; I expect, however, that a more valuable part of the lode is yet standing off to the east. In the 155 the lode has not undergone much change since last reported on. The part we are carrying is 4 ft. wide, but I have yet apprehensions that we have not the whole of the lode, and this we shall at once test by a long jumper hole in the hanging side. We have stopes within 5 fms. of the end worth 140*l.* per fathom, immediately over which, at the 145 fm. level, we have commenced a new cross-cut, and, should it prove as successful as the one below, it will provide us with an almost unlimited quantity of new ore ground at a comparatively shallow point of our mines.—Dumbell's: The lode in the shaft sinking below the 155 has again improved, now worth 40*l.* per fathom; and the 155, driving south, is also worth 40*l.* per fathom. In the 155 north the end has come in contact with a small slide, which for the time has rendered the lode small and poor. In the 140 the lode is larger than the level; the part we are driving in is worth about 50*l.* per fathom. The 125 and 110 fm. level ends are each unproductive. Having had an improvement in some stopes in the roof of the 60, we were induced recently to renew the driving of that level south, where, I am happy to state, we have now a lode worth 100*l.* per fathom. The 50, driving north, has within the last few days fallen off in value, now worth 30*l.* per fathom. I would observe that Blake's stone-breaker, recently set up on our dressing-floors, is more than answering all that we anticipated from it; and I only regret that it had not been sooner erected on our floors.. Having finished the reservoir at Glenroy, we are removing the force, and shall fairly commence on Monday with the new and much larger one at Agneash. The underground workings at Glenroy are resumed, and fairly under way, but there is nothing new or special as yet to report.

GREAT RETALLACK.—G. R. Odgers, J. Harris, Nov. 12: We have no alteration to notice in the adit cross-cut driving towards the blende lode; it continues in the elvan.

— Nov. 16: The men continue to make as much progress as they possibly can with the adit cross-cut towards the blende lode; it is still in the elvan.

GREAT ROCK.—J. Kemp, Nov. 16: The lode in the shaft is not producing as much lead as when last reported, but is a very kindly looking lode. The shaft has now got very troublesome for sinking in consequence of the length of the lift, therefore I think it would be well to commence driving both east and west at once, that we may then put in the cistern and fix the lift, that we may resume the sinking of the shaft. I can put in skip-road, &c., with the carpenter, while the shaftmen get the lead a few fathoms from the shaft. I put two men to rise in the back of the 12 east just behind the cross-cut, and am happy to say we have a great improvement here; in taking down the lode this morning we find it worth fully 20 cwts. per fathom, and likely to improve. I cannot say whether or not this is the bunch we lost above. The stope under the 6 is producing some good saving work. Our dressing is going on. We sold 18 tons of lead on the 10th inst.

GREAT ROYALTON.—Thomas Parkyn, Nov. 16: I am very pleased to inform you the water has increased at the shaft, and that we have the 16 stamp-heads at work. The shaft will be down next week, when I shall instantly drive to intersect King's lode. I have two men in the 16 driving on this lode, carrying about 6 ft. of the lode, which contains rich work for tin. I have also two men stoping at the adit. We are getting on well with the dressing-floors, &c. The engine works well indeed; in fact, I never saw an engine work better. The tin coming out from the stamps is very satisfactory.

GREAT SOUTH CHIVERTON.—J. Nancarrow, Nov. 14: The sinking of Gifford's and Chapman's shafts proceeds favourably. The appearance of the lode in the 60 west is good, and as the water is coming away freely the lode before us is likely to be productive. There is no change to notice in the 60 east. We have a large lode with good flookan in the 40 east; this and all the other places we are pushing on as fast as possible.

GREAT SOUTH TOLGUS.—J. Rodda, Nov. 16: The lode in the 140 rise over No. 3 cross-cut is worth 10*l.* per fathom for tin. The 125, east of Bodilly's cross-cut, on the north part of the lode, is worth 13*l.* per fathom. The stope in the back of this level is worth 10*l.* per fathom. The 125, west of the cross-cut, on the south part of the lode, is worth 12*l.* per fathom. No other change.

GREAT WESTERN.—Edward Rogers, Edmund Rogers, Nov. 16: Fisher's Lode: At Michell's engine-shaft we have fixed a plunger-lift at the 30, and recommenced sinking the shaft by 12 men, 7 fms. stent, at 27*l.* per fathom. The 30, west of this shaft, is suspended for the present, and the men put to rise in back, in order to effect a communication with the winze sunk from the level above; the lode in this rise is worth 12*l.* per fathom. At this level, driving east, the lode has improved, being 3 ft. wide, worth 8*l.* per fathom. At the 30, driving west of the flat rod shaft, the lode is 3 ft. wide, worth 6*l.* per fathom. In the adit end, east of this shaft, the lode is 6 in. wide, producing a little tin.—Middle Lode: The sinking of Curtis's shaft below the 30 is suspended until we make a communication to Michell's shaft for the transit of water. The men are put to stope the ground east of the shaft. The lode in this stope is worth 10*l.* per fm., and improving as we advance. At the 30, west of this shaft, the lode is 3 feet wide, worth 3*l.* per fathom.—South Lode: At the 10, driving east of Willis's shaft, the lode is 6 in. wide, worth 3*l.* per fathom, and opening tribute ground. In the adit level west the lode is 1 ft. wide, worth 2*l.* per fathom.

GWYDYR PARK.—W. Smyth, Nov. 15: At Sutton's shaft, in the 8 fm. level west, the stope is finished to the end of ground, and the men have began to drive; the lode is about 12 in. wide, composed of spar, gossan, sulphur, blende, and lead ore, but not enough to value; at present the end is looking very promising. In the back of the 8 fm. level west the lode is improved, now worth 18 cwts. of lead per fathom.—New Lode, Driving South: Here we have taken down the lode; it is not so good as when last taken down, at present only yielding saving work. There is no particular change in the eastern stope since last report.—Driving West on Vuchesias New Adit: The lode here is greatly improved in size, now about 2 ft. wide, composed of spar, sulphur, blende, and good stones of lead ore, and is a very promising end. In the smiths' shop end the lode is 14 in. wide, chiefly composed of spar, blende, and sulphur, yielding good stones of lead ore, and lets out water freely.

HAMMETT.—S. Bennetts, Nov. 16: I have this day made a thorough inspection of this mine, and find on the north part of the sett six men driving on an adit east, supposed to be the "Tinner's-lane" lode. The end is in some 8 fms. or 10 fms. from the valley, the lode small, unproductive, and the ground stiff. From the deep adit, on the Hobb's Hill lode, a cross-cut is being driven north on a cross-course, with a view to intersect a lode seen north of the elvan course just above the stamps; this lode ought to be soon met with. The cross-cut is in easy ground for driving. I would suggest that a thorough examination be made of the lode in this deep adit for tin, by sending to surface a few tons of the lode from different points. It is a large and well-defined lode, and as tin is found is found in the rubbish from this lode on the other side of the river, I see no reason why it should not be found here also.

HINGSTON DOWN CONSOLS.—James Richards, Nov. 17: At Bailey's shaft, sinking below the 140, the lode continues large, 5 ft. wide, consisting of capel, mundic, quartz, peach, and saving work for copper ore. In the sump-winze sinking below the 140 the lode is fully 5 ft. wide, worth quite 30*l.* per fathom, and promises improvement. In the 130 east the lode is without alteration, still worth 8*l.* per fathom. In the 110 west the ground is a mixture of granite and killas, and fair progress is being made. In the cross-cut north, in the 100 west, the lode is not yet cut through, as progress continues slow. The lode in the stope in back of the 100 is still worth 9*l.* per fathom. In the deep adit level south the ground has a little improved, and the water issuing therefrom contains copper in solution, proving the metalliferous character of the country.

HOBBS HILL.—S. Bennetts, Nov. 16: The operations now being carried on here are confined to two points—viz., in Tinner's-lane, and the driving a deep adit from the eastern boundary towards the first point, with a view to unwater and develope the lode from there. This adit is now in somewhat stiff ground, and some 100 fms. east of Tinner's-lane workings. At the latter place a large and somewhat unsettled lode is seen and opened on some 10 fms. to 15 fms. long and 5 fms. deep, where it has shown good indications and produced good tin-stuff. I have no doubt this lode will improve in depth and in more settled ground. There is a deep adit on the Hobb's Hill lode driven a long distance west. I think it will be advisable to open this adit, ascertain its extent, which probably may find a cross-course in it, on which a cross-cut can be driven north to unwater the workings at Tinner's-lane easier than by the mode at present adopted, cut any other lodes between the two, and be in a position to take any tin ground on the Hobb's Hill lode. In the meantime a sink can be made at Tinner's-lane, so far as practicable, for water, by aid of horse power.

LOVELL CONSOLS.—J. Nancarrow, Nov. 8: The lode in the 22 looks better to-day. The temporary falling off was in size not in quality, but it is now coming out again, and is likely to be as good or better than ever, for we have now beautiful ground about the lode for tin; it cannot be more congenial, and we have got just where the tin should come down from the 12, where we had a lode worth 12*l.* per fathom. There is nothing new in any other place.

MINERA UNION.—J. Nicholls, Nov. 17: Brabner's Shaft: The lode in the 100 yard level south is not so good as last reported; its present value is 15 cwts. of lead per fathom. The stope in the back of the level is worth 1 ton of ore per fathom. The pitch in the back of the 80 yard level north will yield 12 cwts. of lead per fathom.—Boundary Shaft: The 50 yard level north produces a lode of lead, but not a sufficient quantity to value. Two pitches in the back of the level will yield 7 cwts. of lead per fathom. The pitch in the bottom of the 50 yard level south will yield 12 cwts. of lead per fathom.—Fine Shaft: The cross-cut west of the 40 yard level is being driven forward as fast as possible; the ground is now more favourable for progress than for some time past. I hope in a few days to intersect the lode. The tribute pitches continue to yield a fair quantity of lead.

MOUNT PLEASANT.—Wm. Wasley, Nov. 17: Last Saturday being setting-day, I set to the tributers, near Bright's shaft, to raise ore for this month, at 9*l.* per ton, the men to pay all costs, as before. Since my last report we cross-cut Owen's branch, south of Bright's shaft, but as it is only about 5 in. wide, I have the men to clear up the old down hill, west of the boundary shaft, after doing which I intend to put them to drive the end further. The tributers at Wheal Seygoch shaft have driven a great many yards of levels since I reported last, and the last two days they have got a little ore, and as they go further on I expect they will meet with some good runs. We have a parcel of ore dressed, which I expect we shall sell in a few days.

NANTEOS CONSOLS.—T. B. Thomas, Nov. 17: Penrhiw: The 20 fm. level is being driven with all speed on a promising lode. We have passed through a short bunch of ore, but we do not anticipate finding ore until we get under the ore ground seen in the 26, about 10 fms. further west.—Bwich Gwyn: We are making good the shaft, and we hope to commence laying down the tram-road in the 30 fm. level next week; upon that being done we shall commence clearing the levels, &c., to enable us to resume driving the 30 and 40 fm. levels and stoping the ore ground left by the former workers. From the result of our meeting in London, on the 10th instant, I consider we have seen our worst days, and with the assistance of our shareholders I hope soon to see our boys mines making good returns and profits.

NEW CROW HILL.—Thos. Trelease, A. Kent, Nov. 15: On Saturday at the 100 fm. level cross-cut we measured for last month's driving 4 fms. 2 ft.; the bargain was re-set at 7*l.* per fathom, stent one month, or cut the lode. Taking the underlie of the lode as seen at the 70 for a guide we may expect the lode to be about 3 fathoms further driving, but this is not certain, as in a depth of 30 fms. the lode might possibly underlie faster, which would throw it further off; the ground is of a moderate nature for driving through, and the distance anticipated for cutting the lode will probably be arrived at by the end of the present month.—North Lode: In the past month we have extended the adit on the lode 6 fms. 2 ft. 4 in.; re-set at 50s. per fathom, stent 2 fms., or cut through the lode. In the past week we have driven through a very strong portion of the lode, which had the appearance of a caunter lode at first sight, but on further exploration we think it is the east and west lode making wide at this point; we fully prove this we are cross-cutting through it to ascertain the entire size and character of the lode; so far as seen it produces nice stones of mundic, with spots of blende. We think by seeing such fine gossan back and top of the lode the lode will certainly improve as we extend in that direction.

NEW DALE.—R. Niness, Nov. 15: There is no change to notice in the character of the ground—still in alternate layers of dark and grey limestone beds, such as we have been going through for the last 3 fms. The rise in the end ground, on the back of this level, is mixed with blende, spar, and chert, and is most promising in appearance for producing lead, and so is the vein in the winze sinking below the bottom of this level; every effort is being made to prove the ore in the lead-bearing ground as soon as possible. The vein in the main winze, sinking below the 44, yields about 10 tons of lead and 3 tons of blende to the fathom to the space we are now carrying, but to what extent the ore bearing extends it is impossible to say, as we are only following the leader part of the vein for about 12 ft. wide. The raising for the last two months will be from 80 to 90 tons of lead ore, and 30 tons of blende ore, but this is little compared with the quantity that will be raised when the ore-bearing part is cut in the 75 fm. level cross-cut; and there is, I think, every reasonable probability, from the character of the vein ground, that ore will be shortly met with in this level.

NEW GREAT CONSOLS.—R. Pryor, T. Bennetts, H. Tregoning, Nov. 14: Saturday last being our pay and setting, we set the following bargains:—No. 1 stope in the back of the 64 fm. level, by six men, at 6s. per ton of tinstuff. No. 2 stope in the back of the 64 fm. level, by four men, at 5s. per ton; and to stope No. 3 stope in the back of the 64 fm. level, by six men, at 4s. per ton of tinstuff. To stope No. 4 stope in the back of the 40 fm. level, by four men, at 4s. 6d. per ton. No. 5 stope in the back of the 20, by six men, at 4s. per ton of tinstuff. The whole of these stopes will make an average produce of about 2 quarters of black tin to the ton of stuff. The winze to sink below the 10 fm. level, west of Richard's shaft, by six men, at 7*l.* per ton; the lode is large, but at present of little or no value. All the surface work is being pushed on with all speed; and we shall soon have No. 3 calciner at work. Our pay and setting went off satisfactorily.

NEW WHEAL CHARLOTTE.—J. Tonkin, Nov. 15: In the last week the shaftmen have sunk about 3 feet, but they are not down far enough below the cistern to cut through the lode, as the cistern is resting on bearers a few inches above it; they have cut into it about 2¼ feet, and find it still produces good stones of tin, similar to those raised last month. In the 30 east the lode is cut through and found to be 4 feet wide, producing stones of tin, and is of a very promising character. The pitch in bottom of the 30, before this end, is still producing good tinstuff. The other points of the mine are unaltered.

NEW WHEAL LOVELL.—J. Prisk, Nov. 17: The lode in the 50 fm. level, east of cross-course, is 2 ft. wide, worth 15*l.* per fathom; driving at 10*l.* per fathom. The lode in the stope in the back of this level is 2 ft. wide, worth 12*l.* per fathom. The 40 end, east of cross-course, is suspended for the present, and the men put to rise against the new air shaft, which is much required in this level. The lode in the stope in the back of the above level is 4 ft. wide, worth 20*l.* per fathom. The lode in the winze sinking in the bottom of this level is 2 ft. wide, worth 25*l.* per fathom. The lode in the 30 fm. level, east of cross-course, is 18 in. wide, worth 9*l.* per fathom. The lode in the 40 fm. level, west of Hill's engine-shaft, is 4 ft. wide, producing saving work for tin. The lode in the 20 fm. level, west of air shaft, is 18 in. wide, worth 9*l.* per fathom.—Colonel's: The lode in the 40 fm. level, east of shaft, is disordered by the influence of the cross-course, which we are daily expecting to meet with. The lode in the 20 fm. level, west of shaft, is 1 ft. wide, worth 8*l.* per fathom. We have 41 tutwork men employed, sinking shafts, winzes, and driving levels; and 26 men on tribute, at an average of 11s. in 1*l.* We have now a full supply of water for the stamps, and are getting on well with our next parcel of tin.

NEW WHEAL TOWAN.—R. Pryor, Nov. 16: The following bargains were re-let on Friday last. The adit end to drive west on the copper lode, by two men, at 7*l.* per fathom; lode here 2 feet wide, producing some good copper ore. The adit end to drive west on the tin lode, by two men, at 7*l.* 5s. per fathom; lode 3 feet wide, yielding some good quality tinstuff.

NORTHERN.—R. Rowe, Nov. 15: I am only able to report continued progress in the works at the mine. The chief point is the main engine-shaft, which will be completed level with the sea by the end of next week. We met with a little hindrance from the first autumnal heavy rains weakening the rock around the top of the shaft, some of which had to be removed, and the remainder secured by timber; all this is effectually done. The new cross-cut from the cliff is proceeding rapidly; the ground is highly mineralised, and I expect when the lode is intersected to find something good.

NORTH ALLT-Y-CRIB.—C. Williams, Nov. 15: No. 1 Lode: The lode in the western end, where we are now driving, is 4 ft. wide, consisting of light-blue clay-slate, prian, blende, spar, and silver-lead ore, yielding of the latter from 2 to 3 tons, or equal to 40*l.* per fathom; present price for driving, 5*l.* 10s. per fathom, including all cost.—North and South Lode: The lode in the stopes in the back over the adit level is 5 ft. wide, consisting of spar, gossan, and silver-lead ore, yielding of the latter 1½ ton to the fathom. We shall break this month 180*l.* worth of silver-lead ore, at a cost of 40*l.*

— C. Williams, Nov. 17: According to your request, after a careful calculation, I estimate the number of tons of silver-lead ore already broken at this mine at 55 tons, worth 15*l.* per ton; value, 825*l.*

NORTH CROFTY.—J. Vivian and Son, Wm. Thomas, Nov. 17: The lode in the 220, west of engine-shaft, is composed of spar and flookan. In the 208, west of Petherick's shaft, the lode altogether is worth 20*l.* per fathom. The winze sinking under the 196 west is worth 15*l.* per fathom. In the 196 west the lode is worth 6*l.* per fathom. The lode in the 160, east of Rowe's winze, and the winze under the 150 west, are each worth 20*l.* per fathom, and are now being worked on tribute. The pitches are yielding their usual quantities of tin and copper ore. There is no change in the eastern levels. The engines and pitwork are in good order.

NORTH DOWNS.—Francis Pryor, James Williams, Nov. 15: During the past week the sump-winze men have been engaged altering some work in King's shaft for drawing of the flat-rods underground; it is now put in good working order, and keeping the water easy. The lode in the 70, west of western winze, is looking more kindly; the south part, which contained a quantity of mundic, is giving place to some splendid stones of ore; it is 4 ft. wide, and of such a character as but seldom fails to prove productive. Since we have been opening on the lode recently cut in the 60, west of cross-cut, on the south lode, it has a very improved appearance. We are not in a position for a few days to ascertain its real value, by means of our accumulation of stuff in the end, but where cut into it is very porous, and containing some rich copper ore. The midway level, west of rise, is again changing from the blue into a lighter and more mineralised character of ground; lode over 2 ft. wide, containing mundic, with occasional spots of ore. In the winze in bottom of the 60 the lode is worth 10*l.* per fathom. The stope in bottom of the 70 is worth 12*l.* per fathom. The stope in back of the same is worth full 10*l.* per fathom. We have a couple of men cutting through a piece of ground in Bennetts's shaft, in search of Pryor's lode, west of the cross-course; this lode made abundance of ore to the east, but has not been found to the west, and we consider it well worthy of a trial.

NORTH FOWEY CONSOLS.—Agent's Report: Since my last we have opened on two other tin lodes, of an equally promising character, producing good work for tin. The lode in the shaft and the south tin lode look well, and fully maintain their size and character. The several lodes discovered in this extensive sett have far exceeded expectations, the whole of which will produce saving work for tin, with every prospect of shortly becoming a valuable mine.

NORTH ROSKEAR.—R. Angove, J. Hoskings, Nov. 16: The various points of operation maintain their value without alteration, except in the 250, where the sump-winze, where the lode is improving, now worth 12*l.* per fathom.

NORTH TRESKERBY.—R. Pryor, T. Jenkin, Nov. 16: Tresidder's Shaft: In consequence of a breakage to the bucket-rods we have had the water in the 150 for the last fortnight, consequently there has not been anything done in this level since our last report. The lode in the 120 end, driving east of shaft, is 4 feet wide, and worth 1 ton of copper ore per fathom, with a little tin. The lode in the stopes in the bottom of this level is worth 3 tons of ore per fathom

The lode in No. 1 stope, in the back of ditto, is worth 2¼ tons of ore per fm.; and in No. 2 stope the lode is worth 2 tons per fathom. The lode in the 110, driving east, is at this time larger than usual, but we are induced to think that we have a part of the cross-course; the end men at present are engaged in putting up a rise to communicate to the winze sunk from the level above, which has this day been communicated by a borer-hole. This will now give good ventilation to these two ends (the 110 and 100 fm. levels), and will enable us to set another stope in the back of the 110 fathom level, as well as to commence putting up a rise in the back of the 100 in a good lode of copper ore. The lode in Doctor's shaft, sinking below the 12, under adit, is just the same as reported on in our last. The lode in the adit level, driving west of this shaft, is 2 feet wide, and worth 1 ton of copper ore per fathom. All other places are without change to notice since our last report. Our sampling will not be so large this time, in consequence of the water being in the 130, which is prevented us from bringing away the copper ore broken in this level.

KELTOR.—W. B. Collom, Nov. 17: On the north, or tin lode, in the 80 fm., we are driving in a lode 6 ft. wide, composed principally of a hard peach, which is good work for tin. In the drivage east and west on the south part of the same lode, in the 80, it is also composed of peach, containing good work for tin. In the back of the 80 fm. level there are two stopes working for tin, and a large sinking below the 65. All these points are yielding good work for tin. On the south lode, the pitch for copper ore, in the 80 fm. level east, is improving for copper ore. We are getting on with the tin dressing floors as fast as possible. We have fixed 6 heads out of the 12 heads to the stamps axle, and expect to receive the remainder to-morrow.

OLD UNNISLAKE.—F. Phillips, Nov. 16: In the deep adit cross-cut we have driven last month 2 fms. 3 ft. 11 in., and expect to cut the lode every day. In the lode there is no change since my last: it produces good stones of tin, and we are preparing to haul the stuff with the whim, in order to be able to sink the shaft which in depth will, I think, be found of still better quality.

PEDN-AN-DREA UNITED.—Wm. Tregay, Jas. Thomas, Nov. 12: There is not much change to report here since the report made to the meeting, except an improvement in the 60 fm. level west, on the north lode, which is worth 20l. per fathom.

PENHALE UNITED.—Richard Pryor, Henry Bennetts, Joseph Pryor, Nov. 16: Phillips's Engine-shaft: The lode in the stopes in back of the 110, north of shaft, is worth 6 cwt. of lead per fathom. In this level, driving south of ditto, the lode is worth 5 cwts. of lead per fathom. The lode in the 100 end, driving south of shaft, is producing good stones of lead.—Leggo's Shaft: The lode in the 48, south of shaft, is improved, and now worth 5 cwts. of lead per fathom.—Hall's Shaft: The lode in the 110, driving north of shaft, is 18 in. wide, yielding dressing work for lead. There is no change calling for remark in this level driving south of ditto. The same remark may be applied to the 100 north of ditto. The lode in the 80, driving north of shaft, is improving in its appearance and character, and produces fine stones of lead—a very promising lode. The tribute pitches throughout the mine continue much the same as for some time past.

PENHALE WHEAL VOR.—W. H. Martin, Nov. 16: We have completed the engine-shaft 3 ft. below the 140 for a fork, and the men are engaged driving east for a plat; this work we are urging on with all dispatch, so as to resume the sinking of the shaft as early as possible. In the cross-cut driving north in the 130 fm. level the ground is of much the same character, and the men are making fair progress.

PENHALLS.—S. Bennetts, W. Higgins, Nov. 12: So far there has been nothing further seen in the north. The stope in the back of the 70 continues worth 10l. to 12l. per fathom, and that in the 50, on the north lode, 8l. per fm. The winze below the 44, on the Pink lode, is worth 12l. per fathom. The stope above the adit, on the flat-rod shaft, is not quite so valuable, being worth 8l. per fathom. At the Pink end there has been no lode broken in either the 60 or 80 during the week. At Sarah's shaft the various points are without any material change. The west Pit shaft is cleared to about the same depth below the adit in Sarah's, some 15 to 16 fathoms, and down to a level and water. The adjoining footway shaft must also be cleared for the purpose of ventilation before much can be seen here, as the air is bad.

PENRHYN.—W. Johns, M. Whitford, Nov. 15: The men are busily engaged in clearing up the engine-shaft below the 30; the former workers left the lode standing south of the shaft, and it is very pleasing to say it is worth 7 to 8 cwts. of lead ore per fathom; seeing this, we have a right to expect something good when the bottom is reached. A stope in the back of the 30, east of engine-shaft, is worth about 10 cwts. of lead per fathom. The lode in the adit level, on the north and south lode, is looking very promising, producing good stones of ore. The same remarks are applicable to the branch driving west on this lode. The lode in No. 2 winze, sinking below this level, is looking very kindly. In the end driving west on the course of the lode we are breaking good stones of ore. At surface the work altogether is going on rapidly.

PERRAN WHEAL VIRGIN.—Nov. 16: At Sir Frederick's engine-shaft we have cleared and secured the 16 fm. level south 25 fms., and have about 5 fms. further to reach the end. The lode standing on the back of this level is 3 ft. wide, composed of quartz, flookan, mundic, and lead, a strong, promising, and well-defined lode. From the present favourable appearances at this shallow level, we have every confidence in a speedy improvement. As soon as this level is cleared to the end we shall at once commence cutting down and sinking the shaft below this level. At Wilson's flat-rod shaft we have forked the water to the back of the 16 fm. level; as soon as this level is drained we shall at once drop our lift of pumps to the 26 fm. level, which we calculate will take us about a week from the present time. As soon as this is done we hope to write you a more favourable report from this part of the mine. The lode in the adit end, south of Pryor's shaft, is 3 ft. wide, composed of flookan, quartz, prian, mundic, and good stones of lead. The engine and pitwork continue to work well, and we hope to get the mine fully drained at the end of the month.

PLYNLIMMON.—John Paull, Nov. 17: The water is in fork to the 12 fathom level, below adit, and driving eastward resume by six men: the lode in the present end is worth 15 cwts. of lead ore per fathom, and likely to improve. This end is nearly under the winze sunk from the adit, against which we shall rise a fathom or two as the winze cannot be sunk deeper just now, the water being too quick for barrels, &c. We hope to make this communication in a month, which will give ventilation, and enable us to put on 20 more men, to stope ore ground in the backs of the 12 and adit levels. It will also enable the adit level to be driven on eastward into virgin ground, where the prospects of laying open further runs of ore are highly favourable. Three stopes are at present being worked—one over the adit and two in the back of the 12, the lode, on an average, producing 15 cwts. of lead ore per fathom. Drawing and dressing will now go on steadily, and everything will be done to bring as much ore to market as possible. The 24 will be free from water in a fortnight, and driving eastwards will be pushed on vigorously, to get under the long run of ore ground recently opened up, and seen going down in the bottom of the 12.

PRINCE OF WALES.—J. Gifford, Wm. Gifford, Nov. 15: In the 77 east the lode is full 5 feet wide, yielding saving work for tin, and good stones of copper ore, although not enough of the latter to value—a very promising end. In the 77 west the lode is 3½ ft. wide, worth 10l. per fathom. The 77 cross-cut south is favourable for driving, and letting out more water. In the 65 west we are driving by the side of the lode. In the 55 west, on No. 2 north lode, there is no change to notice. The stope in the 77 east is worth 6l. per fathom. Two stopes in the back of the 65 east are worth on an average 10l. per fathom each. The stope in the back of the 65 west is worth 12l. per fathom. The stope in the back of the 55 east is worth 8l. per fathom. The stope in the back of the 45 west is worth 6l. per fathom.

QUEEN.—Wm. Knott, Nov. 16: We are making very good progress with the work in the engine-shaft, and hope in about one week from this time to have heaved up capstan and shears, and be in a position to commence dropping the pitwork. The engineers are making fair progress with the engine.—Cook's Shaft, 30 fm. Level: The men are driving by the side of the lode at this level, both east and west, and the stopes are just as last reported, worth on an average 6l. per fathom.—Silver Department: Bennett's Western Shaft, 10 fathom Level East: The lode in this end continues of a highly promising character, and is producing saving work for silver, and from the stope in the back of the level we have broken since my last two bags of rich quality and five of second quality silver ore. The 10 fm. level, west of Paull's winze, is without alteration to notice. We shall have two parcels more of silver ore ready for sampling on or about the 24th instant.

REDMOOR.—F. Bennetts, Nov. 17: The lode in the footway shaft, sinking below the adit, is worth 9l. per fathom. There is no improvement in the lode in the winze sinking below the level from the winze. The lode in the stope in the bottom of the adit west has improved; we are just in the run of ground we have had in the back. The lode in the stope in the back of the adit west is worth 10l. per fathom.

RHYDTALOG.—James Dunkin, Nov. 17: The men are making fair progress in sinking the engine-shaft; the lode is still producing 1¼ ton of silver-lead ore per fathom. In the 15 fm. level, driving north, the ground is favourable and letting down much more water. The 15, driving west on the east and west lodes, I have let at 6l. per fathom. There has not been much done here since my last report. The weather has not been as favourable during the past week for surface operations, consequently there has been a little delay in completing our surface work.

ROARING WATER.—H. Thomas, Nov. 15: The lode in the 45 west is much improved, and I think ere long we shall have a good paying lode, but we shall have to go a few fathoms more west to reach the deposit of ore seen in the 16 and 28, west of Grady's shaft. We are pushing on as fast as we can.

ROCHE CONSOLS.—Thos. Parkyn, Nov. 16: The smiths' shop is covered in, so now we have some protection for the workmen, and shall be able to lock up all tools, &c. The masons are building the engine-house as fast as they can. We have had some showers, which have hindered them a little. I have had a road made from the main road into the mine; this we wanted badly, as the carriers could not get in with stone, &c. We are getting on well with the carpenters' shop, and all other surface work is going on well.

SOUTH CONDURROW.—J. Vivian and Son, H. Abraham, Nov. 17: We have been engaged in improving and strengthening our pitwork, and the water is now consequently in the 93 fm. level. In the 82 fm. level, west of King's shaft, we have commenced driving west from the south cross-cut, at about 7 fms. behind the end, and we believe that the part of the lode we are driving on will be found to be the central and rich portion of the great tin lode as we get further west, as we are already meeting with some rich stones of tin. The 71 and 61 fm. levels, west of King's shaft, are not so good as they have been, but are still opening out profitable tin ground. The 61 east, on the north part of the tin lode, is worth for a width of 10 ft. 80l. per fathom, with more lode standing to the north, which appears to be of the same quality. In the deep adit level, east of Fraser's shaft, the lode is 3 ft. wide, and worth about 35l. per fathom. The stopes maintain their value, and there is nothing in the other parts requiring remark.

SOUTH GREAT WORK.—S. J. Reed, Nov. 16: The Great Work lode, in the adit driving east of Grylls' shaft, continues to yield rich stones of tin, and the lode is larger than when I last reported to you. The lode in the winze sinking below the adit is 3 ft. wide, worth 8l. per fathom for tin. I have opened on the back of this lode 70 fms. east of our present workings, where the lode is fully 4 ft. wide, impregnated with tin, and the appearances certainly are of a very favourable character. A cross-cut is being put out to prove this lode south of the Colenso shaft.

SOUTH HERODSFOOT.—W. Goldsworthy, Nov. 17: The ground in the cross-cut east, in the 100, is easier, and good progress is being made in driving. No change to notice in the 100 north since last reported on. The engine and machinery are in good order, and the water easy.

SOUTH MERLLYN.—Nov. 17: Vickers's Shaft: The lode in the 90 yard level, north from bottom of sump, is 2 ft. wide, producing about 4 cwts. of lead to the fathom. The lode in the stope below the 100 yard level south is 2½ ft. wide, producing 12 cwts. of lead to the fathom. We hope to be in full force of dressing next week, and be enabled to sell a parcel of ore at our next ticketing.

ST. JUST AMALGAMATED.—R. Pryor, Thos. Gundry, N. Bartle, Nov. 15: Saveall's Lode: The lode in the rise in the back of the 100, west of engine-shaft, is 2 ft. wide, producing saving work for tin. The lode in the 90, driving west of engine-shaft, is 5 ft. wide, and worth 8l. per fathom. In the winze sinking below this level the lode is yielding saving work for tin. The lode in the winze sinking below the 76 fm. level, west of shaft, is worth 4l. per fathom. The lode in the 50, driving east of shaft, is worth 4l. per fathom.—Owl Lode: The lode in the 40 fm. level, driving north of Reddipper shaft, is worth 8l. per fathom. The lode in the 30 fm. level, driving east of shaft on Wheal Dower lode, is worth 4l. per fathom. The lode in the 20, driving east of shaft, is worth 4l. per fm. In this level, driving west of shaft, the lode is worth 7l. per fathom.—Pryor's Lode: The lode in the 30 fathom level, driving west of cross-cut, is worth 3l. per fathom.

TAMAR VALLEY.—J. Goldsworthy, Nov. 17: In the 37, south of Weston's engine-shaft, the driving is being forced on with all speed; the lode is 2½ ft. wide, of a most promising character, and produces fine stones of silver-lead ore, and presents strong indications of an early improvement. In the 27, south of Weston's engine-shaft, the driving is by the side of the lode; the stratum is highly charged with mineral. The tribute pitches are producing fair quantities of silver-lead ore. Our dressing is progressing satisfactorily; we have about 7 tons of silver-lead ore to pile towards our next samplings. The engine and pitwork are in good condition. Our consumption of coals through the mine at this time is about 14 tons per month.

TANKERVILLE.—Arthur Waters, Nov. 17: The lode in the bottom of the shaft below the 92 is very hard, very vughy, and very rich in lead ore. We are carrying lode for 12 ft. wide, in which there is a course of nearly solid ore 6 ft. wide, the remainder being a good course of ore. We are sinking very slowly indeed; the holes every now and then blow away into the vughs, and when one goes into the solid part of the lode it only brings out ground within a small radius of where the powder acts. The stuff we do get, however, out of the shaft is nearly fit for the market. The yield per fathom was never more (if so much) as at present. No change in any of the other points since our last report. We can do little by way of building this rough weather. We are pushing on Watson's shaft from surface to adit, and hope to have a borer-hole through by this time next week.

TAN-YR-ALLT.—Capt. W. Johns (Nov. 16) says—I have pointed out the present mode of working, and there seems to me to be but one opinion as regards the future. Looking at the large masterly lode in the extreme bottom of the mine, the indications showing in the 14 fm. level driving east, with the 24 fm. level fast approaching the shoot of ore driven over in the 14 fm. level, and being now in a position to sink the shaft to a deeper level, I cannot but recommend it to be a good speculation, believing that only depth is required to make this a good and lasting mine. We have to-day sampled (computed) 35 tons lead ore.

TREVARRACK.—J. Pope, Nov. 16: I was at the mine yesterday, and find the lode is from 3 to 4 feet wide, with a very promising appearance, and improving every foot we sink; from its appearance in the present bottom I expect a greater change for the better every day.

VAN CONSOLS.—T. Corfield, Nov. 17: The lode in the 30 east is looking more favourable for deposits of lead than for some time past. In Gundry's shaft sinking is still proceeding with good speed. In clearing the deep adit level east we have been for some time securing under old stopes. The rubbish coming out contains many fine stones of lead, showing there must have been a profitable lode worked at this point. There is apparently a good deal of lode standing on the north side, which I think it will be advisable to cross-cut shortly. All the machinery continues to work very well.

VANNIN.—W. H. Rowe, Nov. 16: The deep adit is now fairly underway, and a small vein of lead and spar already intersected, showing the highly mineralised character of the rocks. I expect to cut another and more important vein in 5 fms. further driving.

VIRTUOUS LADY.—H. Horswill, Nov. 17: The new shaft is down 4 fms. 3 ft. in ground favourable for sinking. In the cross-cut south the ground remains much the same as for some time past. In Metherill's level the lode is worth about 8l. per fathom. In the south adit the lode is composed of splendid gossan and black and yellow copper ore, worth 80l. per fathom. We are driving by the side of the tin lode in the adit level west. In the stope the middle branch is small, but producing very good work for tin. Two men are also working a piece of ground in the back of the old adit; the lode is producing some stamps work for tin. The carpenters are pushing on the machinery, and the dressing operations are going on favourably.

VRON UNITED.—Matthew Francis, Nov. 16: It affords me pleasure to inform you that at all points are look remarkably well. In our main shaft, in which we have attained a total depth of 47 fms., the lode has been gradually improving, and it is now about 3 ft. wide, productive throughout, showing on one side a rib of solid ore from 8 to 10 in. wide. The water having proved itself unusually strong latterly, owing to the influx of the heavy rains, rendering it very expensive to cope with by manual power, we have deemed it advisable to suspend the sinking until we get our machinery to work, which shall be done with the least possible delay. The 40 fathom level west has lately passed through a run producing lumps of solid ore, some of them weighing as much as 5 cwts. each, and we are now stoping it at the low price of 40s. per ton, and it is approaching a still richer run. At Bryn Coch we are daily expecting to meet with the lode; a lode already proved orey at a point further east; and since we are driving in beds of limestone of a nature very congenial to the deposit of ore there is every reason to believe that we shall find it rich at the point of intersection. Dressing operations are progressing satisfactorily, and we shall have a good pile ready for sale by the 1st proximo. In conclusion, I cannot refrain from again congratulating you on the possession of so promising a concern. Its success is now beyond doubt, and no long time will elapse before it will be seen, by the handsome profits it will certainly yield, that it holds a position second to none in the county.

WEST BASSET.—George Lightly, Nov. 16: There has been no alteration of importance in our operations at this mine in the past week. A detailed account of the bargains to be set on Friday next will be presented at the meeting on the 23d instant.

WEST CARADON.—N. Richards, Nov. 15: Marina's Shaft: Allen's lode, at the 55, west of cross-course, will produce 2 tons of copper ore per fathom; the same lode, east of cross-course, will produce 1 ton per fathom. The winze sinking below the 42 is worth ½ ton per fathom. In the 42, east of cross-course, the lode will produce ½ ton per fathom; we have suspended the driving of this level west of cross-course for the present, and put the men to assist in sinking the winze behind this end, where we have a beautiful lode, which will produce over 3 tons tons of good ore per fathom, as it is important that this piece of ground should be opened up as quickly as possible. Clymo's lode, in the shaft sinking below the 55, is yielding splendid stones of ore. We have not yet reached any lode in the cross-cut driving south.

WEST DRAKE WALLS.—T. Gregory, Nov. 17: We are driving by the side of the lode in the 54 west; a small portion of this drivage is composed of soft quartz, prian, &c., with a little good copper ore. The main part is still standing to the north, and will be cut into in due course. In the 54 east a part of the lode is being carried, which is producing saving work for tin; the lode at this point has a strong healthy appearance, and will, it appears, before long prove valuable.

WEST ESGAIR LLE.—R. Harvey, Nov. 17: We have an important change in the stratification in the cross-cut east of old workings, and are hourly expecting to intersect the main lode; should a change take place I will immediately advise you. In the 137 fm. level cross-cut south the ground is favourable for driving, and good progress is being made. We are pushing on the dressing with all speed.

WEST GODOLPHIN.—J. Pope, jun., Nov. 16: Hope Lode: In the deep adit level, driving east of Salt's shaft, the lode is 1 foot wide, saving work for tin.—South Hope Lode: In the deep adit level, driving east of the caunter, although we have not got into the bunch of tin gone down below the middle adit level as yet, the lode is, I am glad to say, improving; it is 1 ft. wide, saving work for tin, and has drained the pitch in the bottom of the middle adit level almost dry. We have resumed the driving of the deep adit level, south-east of Pressure shaft, on the caunter lode, this week, but have not taken down any lode yet; we shall also resume the driving of the deep adit level, east of the caunter, on the north lode, next week. The caunter lode, at Vivian's shaft, sinking below the shallow adit level, is 15 in. wide, worth 5l. or 6l. per fathom. Our engine is working well, and I hope to have the water drained out of the mine in the early part of next week, when we shall begin to increase our returns of tin. Pressure shaftmen are engaged at this time in putting in a new collaring in Vivian's shaft, and Lloyd's shaftmen are engaged clearing up an old sink in the bottom of the deep adit level, west of Lloyd's shaft, on a carbona, from which the ancient miners raised a large quantity of rich tinstuff, but the bottom of it we have never seen, neither can I get any information respecting it. The engineers are busily engaged about the winding-engine.

WEST GREAT WORK.—S. J. Reed, Nov. 16: We have resumed the driving of the 40 fm. level end, west of the flat-rod shaft, on the great north lode; the appearance of which fully warrants the course taken in draining the water, the destrability of which I have so frequently urged; the lode shows signs of improvement, yielding good stones of tin, with indications of greater productiveness. We are now drawing below the 40, and next week operations at the 50 will be proceeded with. In the 30, driving west of Harvey's shaft, the lode is 2 ft. wide, worth 5l. per fathom; this is the most westerly end, with 250 fms. of unexplored ground before it within the limits of the sett. A rise in the back of this level is being out up to provide better ventilation, and will also open out a section of profitable tin ground. The lode in the 20 west has been small, but is again improved, with a rich leader of tin. In the adit west of the flat-rod shaft the lode is worth 10l. per fathom. At the western flat-rod shaft, in the cross-cut towards the north lode, at the 20, we have hard floors of quartz, but fair progress notwithstanding is being made. In the 10, east of shaft, the Trescow Moor lode is worth 11l. per fathom. In my report to the last general meeting I referred to the Oola lode, where a cross-cut was then being put out at the adit level. I am pleased to say the lode has been intersected on the east side of the main cross-course 14 ft. wide, containing rich stones of tin, and the result also of my assays at the point opened gives a value of 8l. to 10l. per fathom; this, however, may not be the true indication of the value for any given distance, being so near the cross-course.

WEST JEWELL.—John Mayne, Nov. 17: Greene's engine is working well, and the sumpmen are engaged cutting down ground in back of deep adit plat, the old shaft being only 4 ft. in length; consequently, we are obliged to cut down the shaft and secure it, which impedes our progress in forking. On the whole, we are getting on quite as well as I expected. We hope to finish clearing the eastern adit this week, which will let down the water about 6 ft. There is no alteration of any importance at Freeman's since last report. We have commenced to bring away the tributers' tinstuff, to prepare for the sampling on Tuesday, the 29th inst. The water-stamps are working well.

WEST PANT-Y-GO.—Nov. 16: The lode in the 110, driving east from No. 1 winze, is still unproductive for lead ore, and the ground exactly the same as in last report. I see no alteration in the 75, and in the 105 yard level cross-cut I am daily expecting to cut the Harseth lode. The discovery at the bottom of the 105 yard level, and westward of No. 1 winze, is looking a shade better. All operations, both underground and on surface, continue much the same.

WEST TANKERVILLE.—A. Waters, Nov. 17: Wood Vein: We have dropped the pump to the stuff upon the bottom of the engine-shaft, and, as we believe, deep enough to admit of draining the 60, or deepest level in the mine. We are now making arrangements to fix bearers, cistern, and pump in the 48, together with putting down another length of main-rods. We have not yet been able to explore the 48, on the course of the lode, having had a difficult job to get past the choke formed by old timber and debris in the shaft in the said level; we expect an entrance will be made in the next two days. You will be glad to hear that in about 10 days from date the mine will be drained to the bottom, and operations commenced on the lode in the 48 and 60 fathom levels simultaneously. The foundations for engine, crusher, and drawing-machine are being got out, and the work will be proceeded with as fast as the weather will permit.—California: The engine-shaft is over 5 fathoms below the shallow adit; lode yielding good orey stuff. We have cleared out the debris to the south end of the said level, and are preparing to sink upon a lode worth 3 tons of lead ore per fathom. There are three lodes within 6 fms. of California shaft, all of which have been productive from surface as deep as they have been wrought upon—i.e., one to roof of upper adit, another to middle adit, and the others to the bottom of the deep adit. Only one of the lodes has been explored up to the south shale, therefore we are looking forward to making discoveries in that direction when the shaft is sunk to the deep adit, and the way opened for getting at all the points. The frost has nearly put a stop to our building operations, and nothing has been done with the new engine for the last week.—North Boundary: The adit is going forward southwards to the south boundary under favourable circumstances. We are continuing the tramway from the dressing-floors to the above level, and hope soon to have the links completed.

WEST WHEAL KITTY.—J. Vivian, Nov. 10: The lode in the deep adit end west continues just the same as last reported on, being 5 feet wide, composed of tin, copper, mundic, and spar, altogether very kindly in appearance. In the middle adit west, which we have been driving on the south side of the lode, we have cut north into the lode about 1 foot, from which we have broken some splendid stones of tin, and the appearance for going further into it is very promising. You shall have more particulars very shortly. The stope in the bottom of this level, on the south part about 12 fathoms behind the end, is worth over 12l. per fathom. The tin sold yesterday amounts to 77l. 8s., which will be paid into the bank to-morrow.

WEST WHEAL TREMAYNE.—S. Roberts, Nov. 15: In the 20 west, which is nearly under Park Toll shaft, there is no change whatever; the ground is easy for driving, being a soft killas, but the lode is small, and yielding much water, which in this mine is a sign of a large lode ahead; and, as I remarked last week, I think that if the lode on which we are driving is not the main part of it that it will soon lead to it; but this we shall soon discover by Park Toll shaft. The lode has taken a downright direction, but we have not altered the course of the shaft much, consequently the lode is not in the shaft at present; we expect it in again shortly. The lode and ground, as far as we have seen, have the characteristics of productiveness. I beg to remark that, although we have not realised the success I had hoped for, yet I think from analogy (and the opinion is concurred in by all practical miners in the district) that the junction of these lodes with the great elvan course that has made so productive the eastern mines will here also give us a brilliant success.

WHEAL BULLER.—J. Inch, Nov. 15: At Hocking's shaft there is nothing new in this part of the mine to report on since my last advice. At Stevens' shaft the stope in the west end is still looking well, worth at present for tin 40l. per fathom. The winze sinking under the 92, east of this shaft, is improving, producing good stamping work for tin. Our sale of tin to-morrow will be from 4 to 5 tons. Next Friday being our setting-day, we intend to set a new stope in the east end of Stevens' shaft, where the lode is worth 25l. per fathom.

WHEAL CREBOR.—J. Goldsworthy, Nov. 16: In the 117 fm. level, west of Kelly's shaft, the driving is by the side of the lode—indications favourable for the production of copper ore; we shall commence to take down the lode next week, also in the 120 fm. level, east of Cock's shaft, when the same will be fully reported on. In the 96 fm. level cross-cut south, towards the Buctor lode, the water is daily increasing, and very strong. In Rich's rise, in the back of the 72, the lode is producing occasional stones of yellow copper ore; here I expect a good improvement. In the rise in the back of the 57, west of Moyle's rise, we commenced taking down the lode to-day, and so far as seen it will produce 2 tons of good copper ore per fathom. The lode in the pitch in the back of the 48 fm. level, west of Cock's shaft, will at present produce 4 to 5 tons of rich ore per fm.

WHEAL FRANCO CONSOLS.—Wm. Doidge, Nov. 15: We have cut through the lode east of Sutton's shaft, at which point it is about 10 feet wide, composed chiefly of capel and spar, with spots of ore and mundic intermixed. The orey part of the lode in the western end is still maintaining its size and character, being about 18 inches wide. The lode in the stopes is opening out a little better. Our progress in driving and stoping is at present rather slow, in consequence of having to draw the stuff with the tackle. We are now about to erect a derrick, which will economise labour, and enable us to prosecute the different points with more vigour. We have about 20 tons of ore ready for market. Produce 5¾, and from 6 to 8 tons waiting for the bucking-mills, which I think is a little better quality. Also about 10 tons, which will produce from 3 to 4.

WHEAL FRIENDSHIP.—Nov. 15: In the 170 fm. level south, west of the main cross-course, we have no change, more than the ground has become much harder and spare for driving, with an increase of water. In the 150, west of Whitburn's cross-cut, the lode is not taken down. Two stopes under this level east, and another west of Crossman's winze, will yield from 2½ to 3 tons of ore per fathom. One stope under the 150, west of Ward's winze, will yield 1¾ tons per fatom; and another, east of the said winze, will yield from 1¾ to 1½ ton per fathom. One stope in the back of the 150 will yield 1½ ton per fathom. One stope under the 140, west of Burgoyne's rise, will yield 1½ ton per fathom; and one stope in the back of the 140 will yield 1 ton per fathom.

WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, Nov. 12: The lode in the 110 east is 18 in. wide, producing stamping work. The lode in the 100 east is nearly 2 ft. wide, and worth from 12l. to 15l. per fathom—a very promising lode. The lode in the 90 east is 18 in. wide, and worth from 10l. to 12l. per fm. The lode in the winze sinking below the 90 is of precisely the same character as we stated in our last—30l. per fathom for 6 ft. long, or 60l. for the length, 2 fms. The lode in the 80 east is worth 12l. to 15l. per fathom; and the lode in the 60 east continues worth 10l. per fathom. We are getting on pretty well with the tin-dressing, and we hope to sell fully the estimated quantity, as per the sampling-book.

— G. R. Odgers, W. Bennetts, Nov. 17: We have no change in this mine since our advice for last Saturday; all the places are producing about the same quantity and quality of tinstone.

WHEAL MARY ANN.—J. Harris, J. Stevens, J. Skeat, Nov. 17: The 250 fm. level cross-cut (Clymo's shaft) is extended 8 fms. towards the lode. The lode in the 240 north is 2½ ft. wide, worth 5l. per fathom; in the same level south it is 2 ft. wide, worth 5l. per fathom. In the 230 north the lode is about 1 ft. wide, and still producing good stones of ore; in the same level south it is 2½ ft. wide, worth 10l. per fathom. In the 210 north the lode is 3 ft. wide, worth 8l. per fathom. In the 200 north the lode is 2 ft. wide, worth 7l. per fathom. In the 190 north it is 3½ ft. wide, worth 6l. per fathom. The stopes and pitches continue to yield their usual quantities of ore. We have this day sold our two parcels of lead ore—No. 1, computed 42 tons, to Messrs. Sheldon, Bush, and P. S. Co., at 22l. 14s. per ton; and No. 2, computed 42 tons, to Messrs. Stock and Co., at 13l. 7s. 6d. per ton.

WHEAL UNY.—W. Rich, M. Rogers, S. Coade, jun., Nov. 12: There is very little alteration in the stopes and pitches throughout the mine since our report of last week. The ground is very favourable for progress in the 150 east, but the lode is without change as regards value. The 130 end east is improved, now worth 15l. per fathom. The 110 end, also, is looking better, worth 15l. per fm.; we have not yet intersected the cross-course in this end, but looking at its position in the 60 fm. level we think we must be near it. The ground is favourable for sinking at Hind's shaft, and the perpendicular lode in it carries stones of copper and tin.

WHEAL TRELAWNY.—T. Grenfell, J. Pryor, Nov. 16: The sinking of Trelawny's engine-shaft by nine men below the 230 goes on much as for some time past, the ground continuing favourable both for sinking and for the production of mineral. The lode in the 222, north of Smith's shaft, is 2 ft. wide, spotted with ore, but not to value. The 210, north of Chippendale's shaft, is now well ventilated; the lode taken down to within 2 fms. of the present end is over 2 ft. wide, and worth 12l. per fathom. In the 210, south of Smith's shaft, and north of Trelawny's, we have a good supply of air: we are engaged in stripping down the capels, &c., prior to taking down the lode, which when last taken down was worth 10l. per fathom. In the 210, south of Trelawny's, the lode is without alteration since last reported, worth 10l. per fathom.

Died.—With regret we have to announce the death of Capt. WM. EDWARDS, one to whom the miners owe so much for his opening out the riches of the neighbourhood, and by whose industry the tin mines in Plympton have been worked so successfully. The Captain has been now for 21 years following out the onerous situation of manager of mines; and, to show his untiring perseverance and assiduity, he actually took the sole charge of five mines at one time—Ashburton United, Wheal Emma, Brookwood, Huntingdon, and Wheal Sidney, and conducted the workings with satisfaction to all. Since then, for the last seven years, he has been manager to Wheal Mary Hutchins, the only mine here that has paid dividends, and Hemerdon United, which he has placed in such good working order that it must be eventually a great benefit to the shareholders. He has been cut off in the prime of life, his age being only 49 years.

INVESTMENT RECORD AND MINING REVIEW.—The November number of the monthly circular issued under this title by Messrs. JAMES HUME and Co., of Old Broad-street, contains, in addition to the matter usually found in periodicals of this class, some remarks well worthy of perusal by those interested in East Wheal Lovell, Tincroft, Cook's Kitchen, Dolcoath, Wheal Kitty, Great Laxey, Devon Great Consols, and other dividend mines, and in various progressive mines at present attracting attention in the market. The price current of some of the principal mining and other stocks affords much valuable information.

NEW SULPHURET SAVER.—Mr. John Pattison, of Nevada (says the *Transcript*) has invented a new sulphuret saver, which has been tried at the Pittsburg Mine and works well. It consists of an ordinary square trough, closed at one end, and supplied with a sliding door at the lower end. The pulp from the battery is run through the trough, and as the sulphurets settle at the bottom, the sliding door is raised at the rate of three quarters of an inch per hour, so that as the sulphurets are deposited they are thus held back. The heavier sulphurets all settle at the upper end, and the lighter ones at the lower end, while the sand is carried off. The sliding door is raised by means of a wheel and shaft, with a screw running around it. The one tested at the Pittsburg has given such entire satisfaction that others are to be put up.

*** With this week's Journal a SUPPLEMENTAL SHEET is given, which contains: "Metals, their Properties and Treatment" (C. L. Bloxham)—Ore Dressing Machinery (*illustrated*)—Meetings of the East Wheal Lovell and the Eureka Gold Mining Companies—Foreign Mining and Metallurgy—Eberhardt and Aurora Silver Mining Company—Foreign Mines Reports—Original Correspondence: Colliery Workings in Durham; Messrs. Vivian *v.* the Swansea Union; Coal-Cutting Machinery (J. Rothery); Best Fuel for the Navy; Improved Communication between the South Wales Coal Field and West of England; Proposed Great Western Maritime Ship Canal (Fuller and Fuller); Mining Prospects (T. Spargo); Gold in Wales (W. Hoskin); Great West Chiverton Mining Company (H. von Uster); East Wheal Lovell; Mining Speculation—the Cost-Book System, &c.

OUR MINERAL WEALTH.—We are enabled, through the courtesy of Mr. ROBERT HUNT, to publish in another column of this day's Journal the summary of the Mineral Statistics for 1869, which will be issued to the public in the course of a few days. Compared with the preceding year the result is highly satisfactory, the increase in the aggregate value of our mineral and metallurgical products being equal to 3,000,000*l.* It will be seen that the get of gold has almost entirely ceased, whilst the value of the miscellaneous metals has increased from 5000*l.* to 500,000*l.* In the other items there has been an almost uniform increase, which must be very gratifying to all connected with our mineral industries. We have given the figures for the last two years side by side, in order to facilitate comparison, and trust to be able each year to furnish equally encouraging details.

POWELL'S LLANTWIT COLLIERIES are henceforth to be worked by a limited company, with a capital of 60,000*l.*, in shares of 10*l.* each. The reputation of Powell's Llantwit coal in the market is so high, and the circumstances under which the property passes into the hands of a public company so exceptional, that it is not surprising that the undertaking should have been favourably received by capitalists. The owner of the properties included in the purchase was the late Mr. Thomas Powell, whose death in Abyssinia, last year, will be fresh in the memory of all, and that they yielded their proprietor an enormous income is generally admitted. The collieries are in active operation, and turning out upwards of 100,000 tons of coal annually, large contracts for the sale of the coal being at present running, and from the highly favourable position of the coal wrought there is no risk of explosions, the strata being so free from explosive gases that the whole of them are worked with naked lights. The executors of Mr. Powell having no authority to carry on colliery operations, they at once entered into provisional arrangements for the sale, in order to prevent the stoppage of the works. The terms are unusually favourable to the new company, the purchase of the three collieries—Tynant, New Tynant, and North Llantwit—having been secured, together with the engines, machinery, fixed plant, and 10½ miles of railway, for 33,500*l.*, and not more than 10,000*l.* additional will be required for completing the new pits and purchasing the movable stores and surplus effects. The profit on a vend of 250 tons per day from each colliery (which it is considered can be relied upon within six months) will exceed 15,000*l.* per annum, and suffice for an annual dividend of 20 per cent. after providing for reserve fund and for reimbursement of capital as the leases terminate. The properties are estimated by Messrs. Thos. Davies, of Pontypridd, and James Williams, of Llantrissant, by whom they have been carefully examined and reported upon, to contain about 6,000,000 tons of workable coal, and as the Llantwit coal realises in Cardiff 1s. 6d. per ton more for consumption, and 1s. per ton more for shipment, than any other house coal, and is always in good demand, the prospects of the enterprise would seem to be all that could be wished for. The prospectus will be found in another column.

RECOVERY OF CALLS.—We are informed that a case was tried yesterday in the Sherigs' Court, Guildhall, for the recovery of calls due on forfeited shares, and a verdict in favour of the secretary of the mine obtained.

EAST LOVELL.—It will be seen by the details of the general meeting, which appear in the Supplement to this week's Journal, that since October, 1869, this mine has divided a profit of no less than 20,000*l.* out of a return of tin of 26,000*l.* Since the last meeting 71 tons of tin have been sold, realising 5373*l.* A dividend of 3812*l.* (2*l.* per share) was declared; an extra month's costs (to the end of August) was charged, as well as the outlay for the whim-engine. It was mentioned that at the bottom of the mine the lode, for 12 ft. long, was worth 200*l.*, and the eastern end 300*l.* per fathom, being about 5 fms. from the rich ground, which has been so often valued at from 800*l.* to 1000*l.* per fathom. Referring to the "slide," about which so much discussion has taken place, the Chairman (Mr. Henry Rogers) stated that "those who knew the mine best regard it as a feature calculated to improve the value of the tin ground. In this mine, as in others, they had more than one bunch of tin, and they were inclined to think that this 'slide,' or more properly speaking bar, of poor ground, was a kind of separation between two rich courses of tin running east and west." The manager, Capt. Quentrall, stated that the mine looked more valuable and permanent than at any previous period, and he believed that before the next meeting results would be obtained not yet generally anticipated.

FURSDON COPPER MINES.—An influential company has been formed to work these mines, of which Mr. N. G. Lambert, M.P., is Chairman. Mr. William Battye has been appointed secretary.

CHAMPION.—In a private letter received by one of the original proprietors in this mine from a mining authority who has seen the property, the following remarks occur:—"Permit me to congratulate you on the discovery or improvement which has taken place in one of your copper lodes. I am not at all surprised to hear it. I never saw better specimens of yellow copper ore than those lying on the surface at the shaft alluded to in this week's *Mining Journal*. I presume you have not yet commenced to bring up the adit to this vein, which I believe will come some 26 or 27 fms. deep at this point. It is certainly very seldom that such massive copper is found so near the surface. How are you progressing with other points? I shall expect to hear of other improvements, if carried out according to suggestions." The agent at the mine reports:—"Before we made this discovery the small water-wheel could keep the shaft clear of water easily at 8 strokes per minute, but now the water has increased so much that 12 strokes per minute are required: and by the present appearance of the lode I think the time is not far distant when we shall have another and much greater improvement." A cross-cut is commenced to cut this lode, which will give backs 26 fms. deeper.

TANKERVILLE.—This mine continues to open most encouragingly. The lode in the shaft never looked so promising as at the present time, corroborating the favourable opinion expressed by the manager in the special report, which appeared last week.

NEW GREAT CONSOLS.—In the Journal of July 31, 1869, reference was made to a reported discovery by Capt. Richard Pryor of tin in this mine, then being worked for mundic and copper ore, an announcement at the time which was not generally believed to be of commercial importance, although subsequent examinations by Capt. Simmons (the Duchy agent), and Capt. Josiah Thomas, of Dolcoath, confirmed the extraordinary nature of the report. Mr. Henry L. Phillips, the managing director of the company, lost no time, however, in investigating the matter, and the result was a recommendation to erect stamping power for the purpose of efficiently testing the lode stuff. The stamps have commenced working, and some twenty tons of tin have been dressed up and sold, which sufficiently attests the value of Capt. Pryor's judgment, and justifies the confidence with which he announced this most remarkable and interesting discovery to the world. Mr. Phillips fully deserves the success which is now likely to accrue to the undertaking, having long and anxiously devoted himself to its support through difficulties which too often attend the career of even the most successful concerns. We shall look forward with much interest to the development of this mine, for we understand that the operations underground, which have been for many months in abeyance, have this week been resumed now that the works at surface have fairly started and the prospects have really improved. The agents' report, showing the operations underground, will be found in the usual place.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, NOV. 18, 1870.

COPPER.	£	s.	d.	£	s.	d.
Best selected ..p. ton	70	0	0-		—	
Tough cake and tile	68	0	0-		—	
Sheathing & sheets..	71	0	0-	72	0	0
Bolts	73	0	0-		—	
Bottoms	73	0	0-	75	0	0
Old	60	0	0-		—	
Burra Burra	70	0	0-	71	0	0
Wire.....per lb.	0	0	9½-		—	
Tubes	0	0	10½-		—	

BRASS.	Per lb.
Sheets	7½d.- —
Wire	7d.-7¼d.
Tubes	9½d.-10½d.
Yellow Metal Sheathing ..	6½d.-6¾d.
Sheets	6d.-6½d.

SPELTER.	Per ton.
Foreign on the spot	£17 15 0-18 0 0
,, to arrive ..	— - —

ZINC.	
In sheets	£21 12 6-22 0 0

QUICKSILVER (p. bottle)	9 9 0

TIN.	Per ton.
English blocks ..	£127 0 0- —
Do., bars (in brls.)	128 0 0- —
Do., refined	131 0 0-132 0 0
Banca	124 0 0- —
Straits	125 0 0- —

TIN-PLATES.*	Per box.
IC Charcoal, 1st qua.	1 5 0- 1 8 0
IX Ditto, 1st quality	1 12 0- 1 14 0
IC Ditto, 2d quality..	1 5 0- 1 6 0
IX Ditto, 2d quality..	1 11 0- 1 12 0
IC Coke	1 2 0- 1 3 6
IX Ditto	1 8 0- 1 9 6
Canada plates, p. ton..	13 10 0-14 10 0
Ditto, at works	13 0 0-14 0 0

* At the works, 1s. to 1s. 6d. per box less.

IRON.	Per ton.
Bars Welsh, in London	7 5 0- —
Ditto, to arrive	7 0 0- —
Nail rods	7 10 0- —
,, Staffd. in London	7 15 0- 8 0 0
Bars ,, ditto	8 2 6- 9 0 0
Hoops ,, ditto	8 15 0- 9 0 0
Bars ,, at works..	7 15 0- 8 0 0
Hoops ,, ditto	8 2 6- 8 5 0
Sheets, single	9 10 0-11 0 0
Pig No. 1, in Wales ..	3 15 0- 4 5 0
Refined metal, ditto..	4 0 0- 5 0 0
Bars, common ditto..	6 10 0- 6 12 6
Do. mrch. Tyne or Tees	6 10 0- —
Do., railway, in Wales	6 0 0- 6 5 0
Do., Swed. in London.	9 10 0- 9 15 0
To arrive	9 10 0- —
Pig, No. 1, in Clyde ..	2 12 0- 3 0 0
Do. f.o.b. Tyne or Tees	2 9 6- —
Do. Nos. 3, 4, f.o.b. do.	2 6 6- 2 7 0
Railway chairs	5 17 0- 6 0 0
,, spikes	11 0 0-12 0 0

Indian Charcoal Pigs, in London, p. ton..	6 5 0- 6 10 0

STEEL.	Per ton.
Swed., in kegs (rolled)	12 10 0-13 0 0
,, (hammered)	13 0 0-14 0 0
Ditto, in faggots	15 0 0- —
English, spring	17 0 0- —

LEAD.	Per ton.
English Pig, com.	18 0 0-18 5 0
Ditto, LB.	18 2 6-18 5 0
Ditto, WB	19 10 0-20 0 0
Ditto, sheet	19 0 0- —
Ditto, red lead	20 10 0- —
Ditto, white	28 0 0-30 0 0
Ditto, patent shot	21 10 0- —
Spanish	17 10 0- —

REMARKS.—The state of affairs on the Continent still continuing as far, apparently, from settlement as ever, we have but little change to report in the aspect of our markets. We can but repeat what we have already frequently observed, that the longer this state of inaction continues the more marked will be the reaction when it does come. Metals are just as much necessaries of life as are the productions of the loom, and consumption is going on, notwithstanding the disturbing influences of war upon most branches of commerce, so that we do not believe ourselves to be over sanguine in looking forward to a period of healthful activity so soon as peace shall be restored. In the meantime there is nothing to be done but to exercise patience, and manufacturers should endeavour to restrict their make as much as possible until the looked-for demand shall spring up.

COPPER.—The business transacted in this metal consists of sales of Chili bars, at 62*l.* to 63*l.* Small quantities of Australian have been sold at 70*l.* 10s.; Wallaroo cake and Burra, 71*l.* Valparaiso charters for the first 14 days of October are announced to be 2700 tons, consisting of 1300 tons of ore and 1400 tons of bars. A sale of 200 tons of regulus is also reported, at 12½.

YELLOW METAL.—The association has been revived, and the price of sheathing again modified, the quotation being now 6¾d., and composition nails 8¾d. per lb. Braziers' 4 ft. by 4 ft. sheets can still be bought at 6d. to 6¼d.

IRON.—The demand for Welsh bars is moderate, and business is done at 6*l.* 15s. The quotation for rails is 6*l.* 10s. to 6*l.* 12s. 6d., but not much doing. There has been rather more enquiry for Staffordshire iron, and prices are firm, as follows:—Hoops, in London, 8*l.* 15s. to 9*l.*; sheets, 9*l.* 12s. 6d.; bars, 8*l.* 2s. 6d. to 8*l.* 5s.; Scotch pigs are dull, and prices have receded to g.m.b. 51s. 9d. to 52s. 3d.

LEAD.—There has been more enquiry, and a good business has been done in pig for the China market. Prices are very firm, and the market has an upward tendency.

SPELTER.—The improvement reported in our last continues. Some 300 tons of Silesian have changed hands, at 17*l.* 5s. to 17*l.* 15s.; and 400 tons Belgian are reported to have been sold, at 17*l.* 5s. to 17*l.* 12s. 6d.

ZINC.—There has been a little more doing in this metal. Between 100 and 200 tons have been sold, at 21*l.* 12s. 6d.

QUICKSILVER: 9*l.* 9s. continues to be the price, but we hear of no transactions for exportation.

TIN.—In Straits there are sellers at 125*l.*, but no buyers. On Wednesday smelters decided on a reduction in the tin standards all round, making quotations as follows:—Common, 118*l.*; superior, 119*l.*; fine, 120*l.*; superior fine, 122*l.*

TIN-PLATES.—IC coke have been in rather better demand, and prices are firmer, with an upward tendency. IC coke, 22s. 6d. to 23s. 6d.; IC charcoal dull, at 26s. to 28s.

IRON TRADE—(Griffiths' Weekly Report).—The all-absorbing question of interest in the City this week is Prince Gortschakoff's notice to the Foreign Office, that his Imperial master no longer considers the most important article of the Treaty of Paris binding on Russia. The reply sent by Earl Granville is dignified, and affords confidence and satisfaction in his lordship's judgement in City circles at this juncture. The violation by Russia of the 16th article of the Treaty of Paris subjudicates the waters of the Euxine, and renders the great forts on the Straits of the Dardanelles an easy prey to Russian ambition. Under those circumstances the feeling in the City is excited, and unfavourable to tranquillity. Turkish Bonds have gone down 8 per cent. Russian tallow has advanced 1*l.* 10s. per ton, and as the feeling of disquietude is intensifying every day, no doubt the above figures will speedily permit wider ranges in the same direction. What effect this Russian note may have on the trade will be best understood by the great rail makers, Russia having been their very best customer. The season now closes with very little prospect of a renewal of those orders next spring, the consequence of the loss of this market will be only too painfully apparent to all engaged in the trade to render any further remark necessary in this direction. We have had a slack market for all kinds of iron this week; the gloomy prospects of the future induce the greatest caution, and checks business in every department. Indents from abroad are scarce; and while the political horizon remains so cloudy and obscure, the iron trade cannot improve, but, on the contrary, must become less active, and fraught with well-founded fears for the stability of present list rates. It is true that the iron industries of France, Belgium, and Prussia are paralysed by the Prusso-Gallic war; it may, however, with equal truth, be affirmed that the same cause has for the moment, to a great extent, dried up most foreign sources of demand, and crippled the various European ports which ministered to their supply.—Cornhill, London, November 19.

COPPER TRADE—J. Pitcairn-Campbell and Co. (Liverpool).—Business transacted during the fortnight comprises on the spot here—775 tons bars, at 65*l.*, down 62*l.*; 875 tons regulus, and 680 tons ore, at 12s. 6d. per unit, at which 100 tons regulus were sold to arrive at Swansea. Arrivals here during the fortnight of West Coast S.A., produce:—Glencoyne, from Valparaiso, with 17 tons bars; Nova Scotian, from Valparaiso, with 180 tons bars and 100 tons Barilla; Araucania, from Valparaiso, with 75 tons bars, 205 tons ingots, and 130 tons Barilla; Index, from Have, with 32 tons bars. At Swansea—San Jose, from Lota, with 453 tons bars and 157 tons ingots. Stocks of copper (Chilian and Bolivian) in first and second hands, likely to be available, are—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	1920	3090	10,770	2380	560
Swansea	3592	7956	2,036	292	242
Total	5512	11,046	12,806	2672	802

Representing about 22,100 tons fine copper, against 17,400 tons fine copper Nov. 15, 1869; 11,800 tons Nov. 15, 1868; 8600 tons Nov. 15, 1867.

Messrs. James and Shakspeare—A small lot of furnace material has been sold at 12s. 1½d. per unit, but smelters are not disposed to pay over 12s. for any important parcel. In bars a few cash transactions have been reported at 62*l.* for good ordinary brands; it is not, however, easy to buy at this figure, and for special marks an advance of 2*l.* to 3*l.* per ton would have to be paid; 300 tons good brands, to arrive, were bought on Wednesday last at 63*l.* per ton. Urmeneta ingots of double refined quality realised 69*l.* 10s. and 70*l.* in Birmingham, whilst the Lota brand only fetched 65*l.* and 66*l.* In Liverpool, the price varying according to quantity. On the 12th inst. telegrams came to hand advising the Chili charters for the first fortnight in October as 1400 tons in bars and ingots, and 1360 tons metal in ore and regulus; during the corresponding period of 1869 the charters were in all for 1794 tons pure. Australian sorts remain without change, but Burra is very scarce, and nothing offering at the market values. English tough continues in demand, and smelters are not free sellers at their quotations; manufactured, however, is exceedingly dull, and can be obtained at a slight reduction.

Messrs. Henry Rogers, Sons, and Co.—Chili bars are again depressed; prices have given way fully 2*l.*, and we have still a very languid market. The charters for September are again large, being over 4000 tons. All the late advices, however, speak of the impossibility of mining operations being continued much longer, except a great change comes over the market. How this is to be effected it is not easy to see. The supply is above the demand, notwithstanding that the consumption has increased. If Chili finds it more profitable to curtail her supplies to European makets we should soon have better prices. At present we cannot look for any extended demand, either for home use or export, unless, indeed, war became general, in which case, as well for ordnance as munitions, consumption would be largely increased, and with a shorter Chili supply we might see very much higher rates ruling for copper. English is still much neglected, manufactured being almost unsaleable.

Messrs. Vivian, Younger, and Bond—The transactions reported in Chili produce consist of about 250 tons of bars spot cash at 62*l.*, and 350 tons to arrive at 63*l.*, also 400 tons of regulus at 12s. 1½d. A few small lots of Wallaroo have changed hands at 70*l.* to 70*l.* 10s., and a moderate demand for English raw copper continues. For manufactured but few orders are being given out. Altogether the market is slightly harder than it was at the date of our last circular. On the 12th instant the cablegram in advance of the Chili mail of Oct. 17 came to hand, advising charters for the fortnight of 2600 tons fine copper—1300 tons in bars and ingots, and 1300 tons fine in ores and regulus.

CHEMICALS AND MINERALS.—J. Berger Spence, and Co., Manchester, Nov. 17—Soda: Cream caustic active at 12*l.* 10s. for 60 per cent.; and white at 13*l.* to 13*l.* 7s. 6d. Soda crystals in good demand at 4*l.* 2s. 6d. to 4*l.* 5s. Soda ash firm at 1¾d. to 1⅞d. per degree; bi-carbonate at 9*l.* 10s. and 14*l.* 15s. for refined; saltcake, 3*l.*; Glauber salts, 3*l.*—Nitrate of soda has been well enquired for, and remains at 15*l.* to 15*l.* 5s.—Potash: More business has been done at 9*l.* to 9*l.* 10s. for 80 per cent., f.o.b. Prussiate: yellow, 11½d.; red, 1s. 9d. to 1s. 10½d.; chlorate of potash, 10½d.—Saltpetre is advancing; foreign sold at 27s. to 29s.; refined at 34s.—Alum very active at 6*l.* 5s. for loose lump, and 7*l.* in export barrels; ground at 7*l.*—Ammonia: Brown sulphate unchanged at 14*l.* to 14*l.* 5s. White and grey sulphate well enquired for at 16*l.* to 17*l.*; muriate, 23*l.* to 25*l.*; carbonate, 6d. per lb.; sal-ammoniac, 43s. to 44s. firsts, and 42s. seconds.—Iron Salts: Green and rusty copperas in more request at 52s. and 54s.; dry at 59*l.*; chloride of iron, 6*l.*; Prussian blue, 1s. 6d. to 2s.—Copper Salts: Sulphate of copper, 23*l.* to 24*l.*—Arsenic at 6*l.* 15s. to 7*l.* 5s. for fine powdered.—Acid: Tartaric as last, at 1s. 3½d. to 1s. 3½d.; oxalic, at 7¼d. to 8d.; sulphuric at 3*l.* 5s. to 3*l.* 15s.—Magnesia: Epsom salts 4*l.* 10s. to 4*l.* 17s. 6d. for refined.—Oils: Olive remain steady, and a limited business only is done. Lubricating: Spindle and loom oils enquired for. Pure white Norwegian cod liver oil at 6s. 6d. to 7s. per gallon.—Pitch is unchanged; 14s. to 17s. offered.—Benzole is enquired for; 30 per cent. 2s. 2d. to 2s. 4d.—Disinfectants: Patent at 5*l.* for Corporations; carbolic at 10*l.*—China Clay 22s. per ton.—Prussiate is unchanged at 6½d. to 7½d. per unit; calcined Spanish at 43s. B.C.—Lime: Bleaching powder without alteration at 9*l.* and 9*l.* 5s. per ton; superphosphates at 4*l.* 5s. and 4*l.* 10s.; mineral phosphates at 60s. and 70s. for 55 per cent.; Estramadura, 1s. 2d. per unit.—Manganese at 70s. to 80s. for 70 per cent.—Iron ore in good request. Hematite at 16s. to 18s.; oolitic at 6s. 9d. to 7s. 6d. in Staffordshire.

The settlement of the fortnightly account has occupied a good deal of the attention of the dealers in the MINING SHARE MARKET this week, and, on the whole, business has been only moderately active. A fall of 2*l.* per ton in tin, following so quickly upon a rise of 4*l.*, has taken the public somewhat by surprise, and has caused rather more depression in tin mines.

The shares mostly dealt in this week have been East Lovell, East Grenville, Wheal Grenville, West Chiverton, Wheal Kitty (St. Agnes), Cook's Kitchen, Rosewall Hill and Ransom, Drake Walls, Tankerville, Providence Mines, West Pant-y-Go, New Beldon, and a few others. The standard for copper ores declined 2*l.*

East Lovells leave off 26½ to 27, cum div.; at the meeting on Wednesday a dividend of 2*l.* per share was declared. The purser explained that the meeting had been put off from want of water, and not from any deficiency in tin. We have not received the official statement of accounts, but understand the tin credited realised 5373*l.*, and that the credit balance in hand was 4473*l.*, out of which a dividend of 2*l.* per share (3812*l.*) was declared, showing a credit balance of 661*l.* Against this it was proposed to charge up another month's cost of 337*l.*, which would bring the costs down to the end of August. The report states the lode in the bottom of western shaft, which has been sunk 20 fms., is worth 20*l.* per fathom. On the south lode the winze has been communicated from the 60 to the 70, and opened out a piece of ground worth 50*l.* per fathom in the back of the 70. On the north lode 5 fms. 3 ft. have been sunk below where the rich course of tin was shortened by the poor ground from the west, which dipped east 4 ft. per fathom for the first 3 fathoms, but is now taking almost a perpendicular direction, and the lode resuming its former rich character; and the agent thinks the tin ground will now again take its usual dip west. The present bottom for 12 ft. long is worth 200*l.*; the eastern end, 300*l.*; and this is 5 fms. from the rich ground which has been so often valued at 800*l.* to 1000*l.* per fathom.

Cook's Kitchen, 17 to 18; Devon Great Consols, 95 to 105; Ding Dong, 18 to 20. Drake Wal' shares have been enquired after at 25s. to 27s. 6d. Dolcoath, 127½ to 130; East Caradon, 4½ to 5; Great Laxey, 17¾ to 18¼; Great Wheal Vor, 5 to 5½; Herodsfoot, 41 to 43; Hingston Down, 10s. to 12s. 6d. East Wheal Grenville, 2½ to 3; at the meeting the accounts showed a balance of liabilities over assets of 89*l.* 2s. 5d., charging costs to end of September. The ores sold in November realised—copper, 928*l.* 0s. 6d.; tin, 373*l.* 10s. 10d. The mine is looking well, and the agent states that if the prospects continue the next sampling will be much in excess of the last; and if there were a fair standard for copper ore this mine, the agent states, would pay good dividends. Marke Valley, 6¾ to 6⅞; Minera, 160 to 170; North Crofty, 1⅞ to 1¾.

New Beldon, ¼ to ⅜. The shaft here having been sunk to the lower grit sill, which is the productive measure in the north, cross-cuts have been commenced towards two well-known productive lodes, which will, we are informed, be cut in about two months. The mines are in the neighbourhood of, if not immediately surrounded by, the richest lead mines in the kingdom, not excepting Van, and they bid fair to become a great success at no distant period. A large number of shares are held by working and practical miners in the district.

New Pembroke, 5 to 5¼. At the meeting the accounts showed a profit on four months' working of 822*l.* 11s. 7d., and a balance in hand, charging up the costs to end of August, of 1190*l.* 14s. 7d. A dividend of 2s. 6d. per share (800*l.*) was declared, leaving 390*l.* 14s. 7d. to credit of next account. The copper ore sold and credited for four months realised 2392*l.* 3s. 1d.; tin, 1809*l.* 5s. 9d. The lode in the shaft below the 75, which had been worth in places 100*l.* per fm. for length of shaft, is not at present so good, but it is hoped it will shortly resume its productiveness. The prospects of the mine generally are described by the agents as very encouraging.

Tankerville, 14 to 14½; the lode in the bottom of the shaft below the 92 is very hard and vughy, and very rich for lead, which is being carried for 12 ft. wide, 6 ft. nearly solid. Perran Wheal Virgin, 1⅞ to 2; Plynlimmon, 2½ to 2¾; Prince of Wales, 11s. to 13s.; Providence Mines, 39 to 41; Rosewall Hill and Ransom, 24s. to 26s. At the Botallack meeting a dividend of 5*l.* per share was declared, leaving 640*l.* in hand. East Pool, 10¼ to 11; at the meeting a divinend of 5s. per share was declared, leaving 18*l.* 15s. 6d. in hand. The profit on the months of August and September was 1583*l.* South Condurrow, 2⅞ to 3¼; South Frances, 26 to 28; Spearn Moor, 18 to 20; Tincroft, 43 to 45; Trumpet Consols, 21 to 23; Van, 57½ to 62½; Van Consols, 1⅞ to 2; West Chiverton, 53 to 54; West Frances, 34 to 36; Wheal Grenville, 2½ to 2¾.

At Redmoor meeting the accounts for nine months, from January to September, were passed, and they showed a balance against the company of 554*l.* 7s. 1d. The tin sold Oct. 18 realised 1579*l.* 15s. 7d.; November sale, 256*l.* 10s. 8d.; and the agent hopes to sell about 10 tons during the next three months. West Maria and Fortescue, 33s. to 35s.; West Pant-y-Go, 20s. to 22s. 6d.; West Seton, 120 to 125; West Tankerville, 2½ to 2¾; Wheal Grenville, 2½ to 2¾; Wheal Jane, 55 to 60; Wheal Kitty (Lelant), 9 to 11. Wheal Kitty (St. Agnes), 8½ to 8¾ (ex div.); at the meeting a dividend of 7s. per share was declared. Wheal Mary Ann, 8½ to 8¾; Wheal Seton, 32½ to 35. Don Pedro del Rey, 2 to 2¼; Pacific, 1 to 1¼. Taquaril shares have been largely dealt in, and leave off 52s. to 54s.; the advices, which will be found in full detail in another column, are very favourable. West Jewell, 3 to 3½; a good deal of business, we understand, has been done in these shares, and the mine is looking very promising. Bedford Consols, 3 to 3½; Bedford United, 20s. to 25s.; Bronfloyd, 2½ to 2¾; Caldbeck Fells, 20s. to 22s. 6d.; Chiverton Moor, 2½ to 3; Frank Mills, 35s. to 40s.; Wheal Crebor, ½ to ¾.

The market for Mine Shares on the Stock Exchange has been steady, and a fair amount of business transacted. Most encouraging advices have been received from Taquaril, which have induced large purchases at advanced quotations. Important discoveries of gold continue to be made, and large remittances are expected at an early date. Don Pedro and General Brazilian shares have receded, and close flat, at quotations. St. John del Rey is again attracting attention, purchases being made at current prices. Sweetland Creek shares are enquired for, the advices being of a satisfactory character; a dividend of 4s. per share has been declared. Among lead mines, Van and Tankerville have been chiefly dealt in; the former has just sampled for the month 400 tons of lead. Every point fully

maintains its former value; the shares are firm, at 58 to 60. Tankerville, 14 to 14½, ex div.; the mine continues to improve. In tin mines somewhat less activity has prevailed, owing to a reduction in the standard. The exception has been East Lovell, in which there has been a considerable amount of business, at improved prices. A favourable report was submitted at the meeting, on Wednesday (at which a dividend of 2*l.* per share was declared), indicating progressive improvement at the bottom of the mine, and at other points. Tincrofts have declined to 43, 45, and Great Vor 5, to 5½. The following are the closing quotations:—Assheton, 3¾ to 4¼; Tan-yr-Allt, 1¼ to 2; Van Consols, 1⅞ to 2; Devon Great Consols, 100 to 110; East Caradon, 4⅛ to 4⅞; East Wheal Lovell, 27 to 27½; Great Laxey, 17½ to 18½; Great Wheal Vor, 5 to 5½; Marke Valley, 6⅛ to 6¾; Tankerville, 13¾ to 14, ex div.; Tincroft, 43 to 45; Van, 58 to 60; West Chiverton, 53 to 53½; Wheal Seton, 32 to 34; Almada, ⅞ to 1⅛; Cape Copper, 8 to 8¼ prem.; Chontales, ⅛ to ¾ prem.; Don Pedro, 1⅜ to 1⅝ prem.; Frontino and Bolivia, 3s. to 5s.; General Brazilian, ¼ to ½ dis.; Pacific, 1¼ to 1⅜; St. John del Rey, 23½ to 24½; Sweetland, 2⅞ to 3; Taquaril, 34s. to 36s. prem.; Yudanamutana, ¾ to 1.

At the Truro Ticketing, on Thursday, 4344 tons of copper ore were sold, realising 16,768*l.* 7s. 6d. The particulars of the sale were—Average standard, 97*l.* 18s.; average produce, 6¾; average price per ton, 3*l.* 17s.; quantity of fine copper, 293 tons 6 cwts. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Oct. 20..	4013	£ 97 3 0	6⅝	£3 14 6	12s. 1d.	£60 6 6
Nov. 3..	1543	96 8 0	7¼	4 4 6	11 9	58 14 0
„ 17..	4344	97 18 0	6¾	3 17 0	11 5	57 3 0

Compared with the last sale, the decline has been in the standard 1*l.*, and in the price per ton of ore about 2s. 6d.

TIN TRADE.—The Standards of Tin Ore were reduced on Wednesday, and are now as follows:—Common, 118s.; superior common, 119s.; fine, 120s.; superior fine, 122s.

COLORADO TERRIBLE LODE.—The sale of ore in Liverpool by public ticketing, on Oct. 18, net 28 tons 12 cwts., gave 3665*l.* 13s. 4d., equal to 128*l.* 13s. 10d. per ton of 20 cwts. They have now in Liverpool awaiting sale about 9 tons (9 tons 3 cwts.) of ore, which show by Johnson, Matthey, and Co.'s assay 545 ozs. silver per ton, and 30 per cent. lead, valued at 140*l.* 18s. 6d. per ton.

At Wheal Kitty (St. Agnes) meeting, on Tuesday (Mr. W. Teague in the chair), the accounts showed a profit upon the three months' working of 1986*l.*, and a credit balance of 2280*l.* A dividend of 1503*l.* (7s. per share) was declared, leaving a credit balance of 777*l.* Details in another column.

At East Pool Mine meeting, on Monday, the accounts for August and September showed a profit of 1583*l.* 14s. 4d. A dividend of 1600*l.* (5s. per share) was declared. The agents' report is among the Mining Correspondence.

At New Pembroke Mine meeting, on Nov. 8 (the Rev. E. J. Treffry, D.C.L., in the chair), the accounts for the four months ending August showed a credit balance of 1190*l.* 14s. 7d. A dividend of 800*l.* (2s. 6d. per share) was declared, and 390*l.* 14s. 7d. carried to the credit of next account. Capts. Francis and John Puckey say—"We have put the flat rods to work at Edgcumbe's Shaft, in the western part of the mine, and have pumped out about 10 fms. of water. We have a long run of workings to drain until we reach the 28 fm. level, after which we hope to make greater speed in forking. During the past four months we have sold 2392*l.* 3s. 1d. of copper and 1809*l.* 5s. 2d. tin, which together realized 4201*l.* 8s. 10d. The prospects of the mine generally are very encouraging."

At South Ward Mine meeting, on Tuesday (Mr. R. McCallan in the chair), the accounts showed a credit balance of 82*l.* 13s. 4d., and a balance of liabilities over assets of 708*l.* 15s. 5d. A call of 2s. 6d. per share was made. Capt. Thos. Foote reported favourably upon the prospects of the mine. The size and character of the lode in the 25 are very satisfactory, and he is more than confident that the next level will be found of greatly increased value. The engine and machinery are all in good order.

At the East Wheal Seton meeting, on Nov. 11 (Mr. Wm. Watson, the purser, in the chair), the accounts for the four months ending August showed a debit balance of 892*l.* 11s. 2d. (of which 703*l.* 4s. 5d. is owing to the bankers). A call of 2s. 6d. per share was made. Considering the onerous and responsible duties of the purser, and the efficient manner in which he conducts the affairs and renders the accounts,—and also the able manner in which the management of the mine is carried on—it was resolved that the purser's salary be increased three guineas, the joint manager's two guineas, and the clerk's one guinea per month. The manager reported that the indications are in favour of meeting with improvements before the next meeting, which will much enhance the value of the mine.

At Bronfloyd Mine extraordinary meeting, held yesterday, at the Victoria Hotel, Euston, Mr. Balcombe (managing director) in the chair, the special resolutions, made necessary by the Stock Exchange Committee, were unanimously confirmed.

At the Rhymney Iron Company meeting, on Wednesday, a dividend was declared for the half-year of 1*l.* 10s. on each 50*l.* share, and 9s. on each 10*l.* share, being at the rate of 6 per cent. per annum.

At the Worthing Mining Company meeting, on Tuesday (Mr. Cyrus Legg in the chair), it was decided to wind-up the company voluntarily. The Chairman and Dr. Wotton (a director) were appointed liquidators. Details in another column.

At the Australian United Gold Mining Company extraordinary general meeting (Major Jelf Sharp in the chair), yesterday, the following special resolutions, passed on Nov. 2, were confirmed:—"That the directors be authorised to increase the capital of the company by the issue of not exceeding 30,000 new shares of 2*l.* 10s. each; that such new shares be issued at 2*l.* per share discount, 2*l.* 10s. to be considered paid; that 5s. per share be paid down, and the remainder in two instalments of 2s. 6d. each, on Jan. 4 and March 4, 1871; that the holders of the preference shares have the option of exchanging the same for new shares now to be issued."

COAL MARKET.—The fresh arrivals this week only amount to 82 ships. The supply of house coal has been barely sufficient for the requirements of the trade, and prices have been in all cases firmly supported, with an occasional advance of 3d. Hartleys steady, and without change in price. Hetton Wallsend, 19s.; Eden Main, 17s.6d.; West Hartley, 16s. 6d. Unsold, one cargo: 20 ships at sea.

The Bank of England return for the week ending on Wednesday evening showed in the ISSUE DEPARTMENT an increase in the "notes issued" of 138,595*l.*, which is represented by a corresponding increase in the "coin and bullion" on the other side of the account. In the BANKING DEPARTMENT there was shown a decrease in the "public deposits" of 7139*l.*, and in the "seven day and other bills" of 17,689*l.*, together 24,828*l.*; an increase in the "other deposits" of 247,779*l.*, and in the "rest" of 3136*l.*; together 250,915*l.*=226,087*l.*: and adding thereto 32,746*l.*, the decrease in the "other securities" on the asset side of the account, there is a total increase in the reserve of 258,833*l.*

OPEN STOCK EXCHANGE.—Quotations of the Sale on Nov. 15:—
Anglo-Argentine Company (Limited), fully paid, 14s. 3d. per share.
Ditto 15 per ct. pref., 10s. 6d. pd., 7s. 6d. per share.
Anglo-Australian Gold Mining Company (Limited), 25s. paid, 5s. per share.
Braganza Gold Mining Company (Limited), 15s. paid, 9s. 3d. per share.
Don Pedro North del Rey Gold Mining Company (Limited), 14s. paid, 2*l.* 3s. 4d.
Eclipse Gold Mining Company (Limited), 15s. paid, 12s. 6d. to 12s. 9d. per share.
Ditto ditto 16s. paid, 13s. 9d. per share.
General Brazilian Mining Company (Limited), 16s. paid, 13s. 6d. per share.
Nevada Land and Mining Company (Limited), fully paid, 24s. per share.
New Quebrada Company (Limited), fully paid, 7s. per share.
Rossa Grande Gold Mining Company (Limited), fully paid, 6s. 6d. per share.
Ditto ditto 15s. paid, 3s. 6d. per share.
Rio Vicente Mining Company (Limited), 8s. paid, 1s. 8d. per share.
Ditto ditto fully paid, 7s. 9d. per share.
Taquaril Gold Mining Company (Limited), 14s. paid, 2*l.* 14s. 6d. per share.
The following are the quotations of the Sale yesterday:—
Aberdunant Lead Mining Company (Limited), fully paid, 15s. per share.
Anglo-Argentine Co. (Limited), 15 per ct. pref., 10s. 6d. pd., 7s. 10d. per share.
Braganza Gold Mining Company (Limited), 15s. paid, 9s. 6d. per share.
Caldbeck Fells Lead Mining Company (Limited), 37s. 6d. paid, 17s. per share.
Ding Dong Mine, Cost-book (cum div.), all calls paid, 16*l.* per share.
Eclipse Gold Mining Company (Limited), 15s. paid, 14s. per share.
Ditto ditto 16s. paid, 14s. per share.
Frontino and Bolivia Gold Mining Co. (Limited), fully paid, 6s. per share.
General Brazilian Mining Company (Limited), 16s. paid, 14s. 3d. per share.
Javali Company (Limited), fully paid, 5s. per share.
Nevada Freehold Properties Trust, certificates, fully pd., 1s. 11d. per certificate.
New Zealand Quartz and Gold Crushing Co. (Limited), fully pd., 12s. per share.
Port Phillip and Colonial Gold Mining Co. (Limited), 1*l.* paid, 20s. per share.
Rossa Grande Gold Mining Company (Limited), fully paid, 8s. 6d. per share.
Sweetland Creek Gold Mining Co. (Lim.), ex div., fully pd., 2*l.* 16s. 6d. per share.
Wharfdale Mining Company (Limited), 8s. paid, 5s. per share.

CONQUEST MINE, ARIZONA.—A prospectus for raising 20,000*l.* for the working of this mine has been issued, through Mr. M. J. Ryan, of New York. No money payment is asked for the transfer, the vendor being so sure of the value of his property that he is willing to take his pay in the stock of a properly organised company, and only requires a fair guarantee to be given that if the property be legally transferred to them work will be commenced and carried on vigorously without unnecessary delay. The mine is situated about six miles east of La Paz, and has been well prospected. A number of shafts and tunnels have been opened, and the vein is found to be well defined and promising. The width is from 3 to 20 ft. Some silver is found in the ore, which is free from sulphurets. Assays of Conquest ore show it to be worth from 21*l.* to 75*l.* per ton. The Conquest ledge has been very favourably reported upon by all who have examined it.

TAQUARIL.—It will be seen by the dispatches, which appear in another column, that the rich shoots of gold are still under water, but the manager expects by the next mail to advise the unwatering of this part of the mine. Since the last report, 6½ tons of ore have been treated in a rough manner, producing 62 ozs. 8 dwts. of gold, equal to 10 ozs. per ton. This result is in the highest degree satisfactory, inasmuch as a large proportion of the ore treated was the ordinary lode stuff. This return exceeds anything yet realised from any Brazilian mine. Another rich shoot was met with the day previous to the date of the report. From this more than 30 ozs. of gold, besides rich nuggets, had been obtained; and the manager expresses a confident opinion that more veins of the kind will be found in the surrounding rock.

LIABILITIES OF MINE SHAREHOLDERS.—The new Vice-Warden of the Stannaries, on the first occasion of presiding over the Court, has had before him an unusually large number of cases, some of them of considerable importance. The cases connected with Clifford Amalgamated Mining Company opened up a very important question—whether the official liquidator, in making out a list of contributories in a cost-book company, has a right to place on the list the names of shareholders who had relinquished their shares previous to the stoppage of the mine, or the order to wind-up the company. By the new Stannary Act no shareholder is liable who has retired from a mine two years before the petition for winding-up; previously, the liability extended to six years. After the learned advocates had well exhausted the subject *pro* and *con.*, his honour delivered judgment to the effect that Mr. W. Borlase was rightly placed on the list, he being indebted to the mine at the time of winding-up.

One very great and important fact as regards quartz mining is thought in Australia to be now thoroughly established—that quartz reefs do not, as previously contended for by many scientific judges, invariably become poorer the deeper they go down from the surface, and eventually become non-auriferous. The Colimann and Tacchi Company, on Sandhurst, are now obtaining very rich stone at a level of 650 feet from the surface in their claim, and they are still sinking deeper, expecting that the reef, which has been worked right down from the surface, will neither run out nor become less remunerative.

TURBINE WATER-WHEEL.—The invention of Mr. H. A. CHADWICK, Burnet, U.S.A., consists partly in the employment of direct and reaction spiral buckets, arranged upon the wheel in alternate sets, with suitable guides for reversing the current of water secured to the trunk or casing between each set, whereby the current, upon leaving each set of buckets, is reversed and caused to strike directly against those of the next set below, until its force is entirely suspended, and it leaves the exit pipe in a "dead," or expanded state. It also consists in the peculiar construction and arrangement of the valves controlling the inlet pipe, whereby the entering current of water is directed so as to strike the buckets of the wheel at the same angle, whatever the quantity of water admitted.

LEAD ORES.

Date.	Mines.	Tons.	Price per ton.	Purchasers.
Nov. 8	Cwmbyr	30	£10 19 0	Sims, Willyams, & Co.
14	Perkins Beach	20	11 14 0	ditto
15	Powell United	45	11 15 6	Burry Port Company.
16	Bwadrain Consols	30	11 1 0	Sims, Willyams, & Co.
17	Wheal Mary Ann	42	22 14 0	Sheldon, Bush, & Co.
—	ditto	42	13 7 6	Stock and Co.

BLENDE.

Date.	Mine.	Tons.	Price per ton.	Purchasers.
Nov. 14	Stiperstones	70	£ 3 14 0	Dillwyn and Co.

BLACK TIN.

Date.	Mine.	Tons	c.	q.	lb.	Price p. ton.	Amount.	Purchasers.
—	—Terras	3	5	0	0	£ 72 10 0	—	—

COPPER ORES.

Sampled Nov. 2, and sold at the Royal Hotel, Truro, Nov. 17.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Devon Great Consols	115	£4 3 6	Brookwood	75	£1 10 0
ditto	105	2 5 6	ditto	61	1 12 0
ditto	98	2 10 6	ditto	51	2 15 6
ditto	97	0 12 0	ditto	50	3 15 6
ditto	96	0 12 0	ditto	49	4 6 6
ditto	89	4 7 6	ditto	32	10 0 0
ditto	88	4 11 0	East Caradon	63	11 0 6
ditto	84	0 14 6	ditto	60	4 6 6
ditto	83	4 19 6	ditto	58	4 16 6
ditto	78	0 18 0	ditto	54	2 0 6
ditto	63	2 1 0	West Maria & Fortes.	75	2 14 6
ditto	61	3 3 6	ditto	70	3 10 0
ditto	59	2 2 6	ditto	45	2 7 6
ditto	54	0 18 0	ditto	30	6 5 0
ditto	53	2 11 6	Wheal Friendship	58	1 18 6
ditto	51	4 6 0	ditto	46	5 9 6
ditto	50	4 10 6	ditto	44	6 10 6
ditto	39	2 18 0	ditto	30	11 0 6
ditto	27	6 0 0	Kelly Bray	100	2 0 6
ditto	14	0 18 0	ditto	50	2 8 0
South Caradon	107	5 15 6	Bedford United	80	2 12 6
ditto	92	4 11 6	ditto	60	3 18 0
ditto	48	10 7 0	Phœnix	80	3 4 6
ditto	47	10 8 0	ditto	50	5 6 0
ditto	46	7 11 0	Gunnislake (Clitters')	46	4 5 0
ditto	45	7 5 6	ditto	37	3 13 6
ditto	43	7 12 6	ditto	34	3 11 6
ditto	42	4 13 0	Prince of Wales	51	5 4 6
ditto	29	5 14 6	ditto	49	5 19 6
ditto	28	9 9 0	West Caradon	36	4 2 0
Marke Valley	95	3 5 0	ditto	35	4 1 0
ditto	94	3 5 6	ditto	15	2 18 0
ditto	90	5 7 6	Wheal Crebor	78	3 6 0
ditto	60	3 14 0	Craddock Moor	75	4 16 6
ditto	59	3 19 6	Devon and Cornwall	46	2 1 0
ditto	50	1 3 0	ditto	4	13 10 0
ditto	40	2 0 0	Wheal Crelake	46	2 10 0

TOTAL PRODUCE.

Devon Great Con.	1404	£3782 11 6	Phœnix	130	£ 523 0 0
South Caradon	527	3652 18 6	Gunnislake, &c.	119	460 3 6
Marke Valley	488	1667 16 6	Prince of Wales	100	559 5 0
Brookwood	318	1072 6 0	West Caradon	86	332 17 0
East Caradon	235	1343 5 6	Wheal Crebor	78	257 8 0
West Maria, &c.	220	743 15 0	Craddock Moor	75	361 17 0
Wheal Friendship	178	981 7 0	Devon & Cornwall	50	148 6 0
Kelly Bray	150	322 10 0	Wheal Crelake	46	115 0 0
Bedford United	140	444 0 0			

Average standard.....£ 97 18 0 | Average produce..... 6¾
Average price per ton.....£3 17 0
Quantity of ore.....4344 tons | Quantity of fine copper..293 tons 6 cwts.
Amount of money.....£16,768 6 6
LAST SALE.—Average standard.....£ 96 8 0—Average produce..... 7¼
Standard of corresponding sale last month, £ 97 3 0—Produce, 6⅝.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Vivian and Sons	1071 5-6	£3531 16 7
Grenfell and Sons	344½	1952 16 3
Sims, Willyams, and Co.	598½	3176 8 10
Williams, Foster, and Co.	803½	3098 1 10
Mason and Elkington	469¾	1694 6 6
Bankart and Sons	217	412 1 0
Copper Miners' Company	251	1049 10 3
Charles Lambert	415½	854 7 9
Sweetland, Tuttle, and Co.	173	998 17 6
Total	4344	£16,768 6 6

NO SALE on Thursday next, November 24.
Copper ores for sale at Tabb's Hotel, Redruth, on Thursday week—Mines and Parcels.—West Tolgus 440—West Seton 310—Carn Brea 279—South Crofty 258—Crenver and Abraham 252—Wheal Seton (Pendarves) 238—North Treskerby 195—East Pool 106—Wheal Basset 87—East Carn Brea 65—Clifford 55—Wheal Kitty 40—Bugleholo's Ore 26—Emily Henrietta 21—East Basset 14—Tresavean 13—Pennance 10—North Roskear 8—Pendarves United 6.—Total, 2423 tons.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be *filed* on receipt: it then forms an accumulating useful work of reference.

PREVENTING BOILER INCRUSTATION.—Can any correspondent oblige by giving the proportions to the water of each article used by by the Darmstadt Gas Company, as noticed in the Journal of Nov. 5?—WM. GRIFFITH.

NEW ARTIFICIAL LIGHT.—Although I am unable to give the exact address of the manufacturer of Phillips's carbo-oxygen light, it may be useful to your correspondent, who seeks to ascertain details concerning it, to learn that it was originally introduced at Cologne, so that a communication addressed to that place would probably reach the inventor.

NORTH ROSKEAR.—"J. H. J."—Information respecting this mine can be obtained through Mr. Wm. Ward, Crosby-chambers, Bishopsgate.

EXMOUTH.—In reply to the enquiry in the Journal of Nov. 5 why so few reports are sent to the Journal, I may state that nearly all the shares are firmly held by a few private gentlemen residing at or near Bristol, and who hope and believe the mine will very soon speak well by its sales of ore, which is far better than reports.—A SHAREHOLDER.

THE PARYS MOUNTAIN.—For descriptive articles see the Journal of Oct. 18, 1860; Aug. 23, Sept. 13-20, 1862; May 13, 1865; and Aug. 13, 1870.

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON, NOVEMBER 19, 1870.

OUR MINERAL WEALTH.

The Mineral Statistics of the United Kingdom for 1869, prepared by Mr. ROBERT HUNT, F.R.S., the Keeper of Mining Records at the Royal School of Mines, have just been completed. Compared with the returns for the preceding year, there is again the very satisfactory increase in the aggregate value of the metals produced, coal raised, and minerals obtained but not smelted (salt, barytes, &c.) of 3,000,000*l.*, the absolute total value having been 46,449,691*l.* in 1869, against 43,525,524*l.* in 1868. In the quantity of coal produced there has been a large increase, the returns for the last three years being 104,500,480 tons in 1867, against 103,141,157 tons in 1868, and 107,427,557 tons in 1869. This will be to some extent accounted for by the increase in the make of pig-iron, the production of our blast-furnaces having been 4,761,023 tons in 1867, increasing to 4,970,206 tons in 1868, and to 5,445,757 tons in 1869. Our exports do not show a corresponding increase, the exportations of coal, coke, anthracite, and patent fuel having been 10,565,829 tons in 1867, against 10,967,062 tons in 1868, and 10,744,945 tons in 1869. The great advance, therefore, has been in our home consumption, and must be referred chiefly to the renewed activity of our manufactures. An examination of the returns showing the movements of coal will prove this to have been the case.

In order to permit of the movements of the several products to be compared, we subjoin a complete summary for the last two years, in explanation of which it may be mentioned that the value of the coal is calculated at the actual cost of raising, before any charges for movement are added. With reference to the item "gossans, ochres, &c.," it is stated that the oxide of iron obtained from the precipitating works and mines is being largely used for gas purification; but for 1869 it has been difficult to obtain reliable returns. The salt is estimated at the value given in the return of the exports.

MINERALS.	Raised in 1868. Tons.	Value.	Raised in 1869. Tons.	Value.
Coal	103,141,157	£25,785,289	107,427,557	£26,856,882
Iron ore	10,169,231	3,196,600	11,508,525	2,732,550
Tin ore	73,963	770,205	14,725	1,027,805
Copper ore	757,335	642,103	129,953	519,912
Lead ore	95,236	1,150,768	96,866	1,189,030
Zinc ore	12,781	39,191	15,533	49,364
Iron pyrites (sul. ores).	76,484	53,536	75,948	41,023
Gold quartz	1,191	1,000	—	—
Arsenic	3,300	9,710	2,561	11,464
Gossans and ochres	6,692	6,372	5,709	4,943
Wolfram & tungstates.	9	67	25	323
Fluor-spar	60	42	—	—
Manganese	1,700	7,650	1,558	7,897
Barytes	14,235	8,748	5,987	3,415
Coprolites	37,500	71,500	—	—
Salt	1,513,840	927,227	1,250,000	687,500
Clays, fine and fire	1,012,479	317,770	1,200,000	450,000
Earthy minerals not returned (estimated)	650,000	—	—	670,000
Total value of minerals produced		£33,637,858		£35,252,120

METALS OBTAINED FROM THE ORES ENUMERATED.

	1868.—Tons.	Value.	1869.—Tons.	Value.
Iron, pig	4,970,206	£12,881,280	5,445,757	£13,614,397
Tin	9,300	901,400	9,760	1,201,456
Copper	9,317	761,602	8,291	644,065
Lead	71,017	1,378,404	73,259	1,397,415
Zinc	3,713	75,435	4,500	92,400
Silver Ozs.	835,542	229,773 Ozs.	831,891	207,972
Gold	1,012	3,522	18	62
Other metals (estimated)	—	5,000	—	500,000
Total value of metals produced.		£15,736,416		£17,657,767

ABSOLUTE TOTAL VALUE of the METALS and COAL, with other MINERALS (not including Slates, Lime, Building Stone, or Common Clays), produced in 1868 and 1869 respectively:—

Value of the metals produced from the mines of the United Kingdom	1868. £15,736,416	1869. £17,657,767
Value of coal	25,785,289	26,856,882
Other minerals, not smelted, salt, barytes, &c.	2,003,819	1,935,042
Total	£43,525,524	£46,449,691

The production of gold appears from the return to have almost entirely ceased, only 62*l.* worth having been obtained in the year, and it will be noticed that there is no return for coprolites in the present summary. The increase in the production of "other metals" from 5000*l.* value to 500,000*l.* is very remarkable, and must arise, we should presume, rather from more complete returns having been obtained than from other causes. Some additions have been made to the statistics of 1869, and every effort has been made to ensure the reliability of the returns published, and Mr. HUNT feels it his duty again to express his obligations to the coalowners, metal miners, ironmasters, smelters, and others who have, as usual, with the utmost liberality furnished the returns upon which the publication relies.

The additions referred to by Mr. HUNT are further explained by Sir RODERICK I. MURCHISON, Bart., K.C.B., the Director-General of the Department, in his introductory notice, in which, after regretting the unavoidable delay in the issue of the returns, owing to the protracted illness of Mr. HUNT, he states that at the suggestion of the Association of Tin-Plate Makers, the first attempt has been made to collect statistics of this important manufacture. The production of ores from the mines of the United Kingdom exhibits but slight variation. There has, however, been some increase in the quantity of tin produced, and the manufacture of pig-iron is somewhat above the average of the last few years. As representing correctly the importance of our great mineral industries, Sir RODERICK believes that the Mineral Statistics of 1869 will not suffer by comparison with the publications of former years. In future Journals the details of the returns will be more fully referred to.

THE TRUCK SYSTEM IN THE BLACK COUNTRY.

Anticipating the enquiry of the Royal Commissioners, shortly to be held in South Staffordshire, the *Birmingham Gazette* has commenced a raid upon the "tommy shops" connected with the iron works and collieries, and a special commissioner has been sent into the district. Several letters from this commissioner have appeared, and the greatest prominence is given to them. Such an impetus has this given to the matter, that the paper now almost daily teems with letters from masters, managers, and workmen. There has been every reason to compliment the *Birmingham Gazette* for the articles on the "Truck System," as carried on in the nail trade—but we cannot extend our praise to the articles on the iron trade.

We have no wish to find fault with or criticise our contemporary, yet we think it only justice to a large portion of the ironmasters of South Staffordshire that we make a few remarks upon the subject, and before doing this we have made ourselves well acquainted with the matter. That the "truck system" is carried out to some extent in the iron trade of this district, and in some instances with baneful results, we have no wish to deny, yet we think it only fair that before circumstances connected with it are blazed abroad that both sides of the question should be heard, and it is only due to respectable firms of ironmasters that before they are publicly condemned a chance should be given them to defend themselves. The special commissioner, having his mind charged with the results of the "truck system" as practised amongst the nailers, has gone into the Black Country with the intention of revealing "some startling facts," and to do this he has evidently sought out those who are for some reason or other the bitterest enemies of the system, and a few workmen. We fancy the former are more enemies of those by whom the system is carried out than of the system itself; and as regards the workmen, there are to be found in any works discontented, miserable creatures, who are ever ready to detail their wrongs, or supposed wrongs, to anyone who will give them a hearing, at any time, and no matter what the cause. From such as these the information of the special commissioner seems to have been gleaned, nor does it appear that he has gone to the ironmasters or conductors of the "tommy" shops to hear their side of the question. The consequence is that letters are daily published from ironmasters and managers flatly contradicting the "facts" the special commissioner makes public; and these letters also state that their writers would have been most happy, had the commissioner called upon them, to have given him every information and opportunity for judging of the working of the system. Actual "trucking" is not carried on amongst the ironworkers and colliers, but the custom is, where stores are kept, to pay the men fortnightly, and to allow them to draw as often as they like at some places, or once a week at others; and it is stipulated, or understood, that part of the money paid as a draw is to be spent at the shop belonging to the firm.

The two firms whose wrong doings are most ostensibly paraded before the public are the Patent Shaft and Axletree Company, Wednesbury, and Messrs. SAMUEL GROUCUTT and SONS, Bilston. Upon the high standing of these firms we will not dilate, as they are so well known. The special commissioner has accused them of most dishonest dealings towards their workmen, and states "facts" that tend to prove they grind down and impoverish their workmen by practising the truck system. Mr. WILLIAMS, the manager of the above company, denies, in a very able and explicit letter, the statements of the commissioner, and those who are at all acquainted with this gentleman will be most ready to receive his explanation, for he is known to be one of the best friends of the working man in the Midland Counties; it was he who some time since gave the puddlers under him a rise of 6d. per ton, without regard to the rule of regulating the wages by the price of iron, as he considered they were, as a body, underpaid. The Messrs. GROUCUTT have in a similar manner to that of Mr. WILLIAMS refuted the chages brought against them.

We have made enquiries, and find from answers to questions put to the workmen and their wives that the "tommy shops," conducted as they are by the before-mentioned firms, are a real benefit, and this the following facts will prove:—In the first place, the articles sold are of a good quality, and as cheap as at an ordinary tradesman's; by purchasing them, therefore, the workman is not imposed upon, and the master gets the regular trade profit, sometimes more, as he purchases with cash from the wholesale houses, instead of having credit in the usual way. It is well known that, as a class, the ironworkers and colliers are very improvident, and where they are paid weekly, after they have left the publichouse, there is often but a few shillings for the poor wife to receive; in other cases their wages seldom last them over the middle of the week, and the consequence is they have to get credit from some small shopkeeper, or otherwise go short. Now, where the stores are kept the wife is sure, or nearly so, of a certain amount of provisions, and she can get a draw and provisions between the pay-days. A working man's ambition is to keep a pig, and to fatten it; he requires a bag of meal, this he can get on credit from the stores, when no tradesman would supply him on the same terms.

We might give many other instances in favour of the "truck shops," and we could produce scores of workmen's wives to prove that it would be a bad day for them were the well-conducted "tommy shops" abolished. We would gladly see them cleared away, for in many instances the system of "trucking" is greviously abused; but before this is done we would have the working man raised higher in the social scale, and led to see the folly of his improvidence; as long as they remain in their present state we say stores conducted as they are by the firms mentioned are a benefit. Were the "truck system" carried out amongst the ironworkers, &c., as it is amongst the nailers there would be some real causes for complaint; as it is there are few.

IMPROVED METHOD OF MANUFACTURING PIG-IRON IN SCOTLAND.

During the last year or two the ingenuity of the Scotch ironmasters has been exercised devising some plan by which they might more effectually cope with Middlesborough in the manufacture of pig-iron. A few months ago Mr. RICHARD BROWN, of the Shotts Iron Company, suggested the propriety of taking the ironstone hot from the kiln, after having been roasted, and placing it in the smelting-furnace, in order to preserve the caloric at the roasting point, and so save the fuel which was necessary to bring it up to that point, after having allowed it to cool down to the temperature of the atmosphere; or, as was too frequently the case, bringing it up to the temperature of the roasting heat, after its exposure to the atmospheric influences for, perhaps, 10 or 20 years. The process was tried, and found economic, the drawback being the distance, in too many instances, of the roasting-pits from the smelting-furnaces. Since that time science has been questioned and studied, and experimented with, for the purpose of assisting our smelters in the production of their iron, and two plans are at present being experimented with—one at the works of Messrs. MERRY and CUNINGHAME, Ayrshire, and the other at Calderbank, in Lanarkshire. Of the two methods, the one seems to us to be the perfection of the other, as in some of the leading features, we have been informed, they are identical. Of the one most matured we give the following description, merely premising that while the process is regarded as a success, the details following may not ultimately be all required:—Through the kindness of Mr. FERRIE, the manager for the trustees of the Monkland Iron and Steel Company, an opportunity was afforded for examining a new furnace which has been erected in order to give a fair trial to a patent recently taken out by him for an improvement in the manufacture of pig-iron. The furnace in its construction has been much heightened, and is 83 feet high. The top is completely closed, not an atom of smoke or flame escaping, and it is covered by a bell and cone divided into four slanting compartments, into which the raw materials are put, the bell and cone being lifted and lowered by a small engine situated on the top of the furnace. When the bell is lifted the minerals fall down the cone into four separate arched divisions, partially separated from the rest of the furnace, and which are heated up to 1500° by part of the gas (carbonic oxide) emitted from the top, which is brought down by a flue, gradually converting the coal into coke. Before passing down into the furnace the other minerals received the same heat. Another flue conducts the rest of the gas down to the hot-blast heaters, and from this single furnace enough gas is generated to fire all the heaters for the six furnaces now in blast at Calderbank. When Mr. FERRIE gets another furnace into operation he will not only be able to heat it in addition, but it will also fire all the boilers connected with the blast-engines. The great advantage of this plan over the Middlesborough system is that, by collecting the gas off the raw coal whilst undergoing the process of coking in the retorts (the great point in the patent), double the quantity is obtained, whereas at the above-named place, where the coal is all coked before being put into the furnace, the quantity is very much less. Although the furnace has only been a short time in operation, Mr. FERRIE is saving just now 15 cwts. of coal to the ton of pig, and expects to save a ton, by means of the heat applied to the furnace by the gases in the coking process, besides the dross and labour at the heaters; thus making the reduction in the cost of production—(say) 1 ton of coal, 5s. 6d.; dross and labour, 2s.=7s. 6d. Under this patent a saving of dross and labour may be obtained on each of the other old-fashed furnaces of 1s. per ton; and when the blast-engine boilers are heated with gas there will be a further reduction of 1s. to 1s. 6d. per ton on the furnaces which are not yet on the patent principle. We may mention that, from all appearances, this furnace will yield a third more than an ordinary one.

The cost of building a furnace suitable for working Mr. FERRIE'S patent is estimated at 3500*l.*, and the expense of altering one of those in present use is calculated to be 700*l.* Should the apparent promise of this patent be realised, Scottish ironmasters will be largely benefited by the result.

THE STEAM BOILERS IN CORNWALL.

There was reason for us early in the year (Jan. 15) to sound a note of warning for the especial benefit of those of our friends in Cornwall who have the care of steam boilers; and it would seem that in the middle of the eleventh, even as in the middle of the first, month of this year we should not upon the same subject be silent. At South Wheal Frances, near Pool and Redruth, there are three steam boilers. As may be imagined, they are of that serviceable class that originated in Cornwall—a class of boiler respecting which Mr. L. E. FLETCHER, the chief engineer to the Manchester Steam Users' Association, says that when well made and well looked after it is one of the safest that can be adopted, and never bursts until it is abused. Of the three boilers of this class at South Wheal Frances, the one furthest from the engine became a wreck on Thursday, Oct. 27, and one man was killed. Its dimensions were 36 ft. long, by 6 ft. diameter. The diameter of the tube was 3 ft. 9 in. The plates of which it was composed were originally ⅞ in. thick, and it was worked at a pressure of 38 lbs. The accident resulted from the collapsing of the tube, the top of which fell in from end to end. One half of the tube, and the front of the boiler, was blown out; these portions were closely followed by the centre part of the tube, and all fell in a forward direction. The shell, having in it the back part of the tube lying collapsed, was thrown to the rear. Here was a case which everybody concerned pronounced one of shortness of water; their views would, no doubt, be supported by more than 90 out of every 100 Cornish engineers. Nevertheless, we unhesitatingly pronounce it to be a case of weakness of tube. The boiler, when new, should, according to Sir WM. FAIRBAIRN'S table, have stood a pressure of 70 lbs. It was five years old, and somewhat corroded, and most likely burst at its usual working pressure, for it had been kept on at near that pressure for some time before.

In boilers of this size there is very little margin for variation of water, as the top of the tube is so near the shell. It may likewise be set down that in so large a tube the natural tendency is to become out of the true circle. When the perfect circle is lost the strength is immensely reduced, especially if the altered shape should take the form it is most likely to assume, and the top flatten down. This tube, if it should be out of the true circle to the extent only of 3 in., would be reduced in strength one-half. The corrosion which we have mentioned was slight, but in one place the thickness of the plates in the tube was reduced from ⅞ in. to ¾ in. According to the tables, these facts alone would bring down its strength to 30 lbs. Thus, if Sir WILLIAM FAIRBAIRN is right, this boiler must have been working at the bursting pressure instead of at the safe pressure of one-sixth of it. With some confidence we have asserted that this tube did not collapse from shortness of water but from weakness. Those from whom we differ in this regard, and for whom we have great respect, have a right to demand our reasons for the conclusion. We give them. Such experimenters as Sir WILLIAM FAIRBAIRN know that when a tube bursts from shortness of water a portion of the top drops in a little, it pushes up its sides, and a kind of gutter is formed, running along the whole length of the top. This comes about by reason of the softening of the top, through the flame acting upon a part from which the water has receded. Amongst the most recent of such cases was one that happened at an iron works at Smethwick, near Birmingham, to which attention was drawn at the time in this Journal. In the Wheal Frances case, however, the whole tube gradually collapsed from the top, bulged out its sides, and assumed the shape of a half circle lying on its convex side, with comparatively little space between its top and bottom plates. Such a shape would only have been assumed when the iron was at the customary low heat of a Cornish tube in work, and encircled with water. Of the six cases particularised in the *Mining Journal* of Jan. 15, we said that four resulted from tubes too weak to bear the pressure to which they were being subjected. Of the last accident in Cornwall we say that the tube was too weak for the pressure.

The most serious feature of these accidents is that by men in whose minds there ought to be no fallacious deductions upon such a question they continue to be attributed to the wrong cause. One of the cases mentioned by us in January was that in which a tube collapsed immediately it had been put to work to replace an explosion four months before, and this was the third explosion at the same place in three years. At Wheal Frances the tube which we have so fully described replaced one to which an accident occurred a few years ago. The people having charge of the boiler are understood on all hands to have been generally very careful. Mr. FLETCHER lays it down that explosions are to be attributed only very rarely to the negligence of those who have them in charge. Our own experience, however—and it is supported by a paper which appears as an appendix to the Minutes of Evidence of the Select Committee on Steam Boiler Explosions, to whom we see it was supplied by Mr. MARTEN, the chief engineer of the Midland Boiler Inspection Company—is that explosions may be pretty equally divided over faults in original construction, faults during working, and faults of minders. If it be as the Cornish engineers imagine, then the minders of the boilers in that county are careless to a shocking degree. It is not, however, fair to conclude that this is so. In his evidence before the Select Committee Mr. FLETCHER showed that, notwithstanding the safe character of Cornish boilers, out of 227 that burst in six consecutive years 49, or 22·5 per cent., were Cornish. Thus, we have one out of every four or five of the aggregate of explosions occurring to that class. Mr. FLETCHER attributes this large percentage to the weakness of the tubes. He draws attention to Sir WILLIAM FAIRBAIRN'S tables, says they are now generally adopted by many first-class makers, but are neglected by others. In some parts of the country, he remarks, it is impossible to persuade steam users that a furnace-tube can collapse from any other cause than that of shortness of water. A number of explosions from collapse of the furnace-tubes he then proceeded to adduce. All these explosions, he said, would have been prevented by adopting the simple precaution of strengthening the tubes by encircling hoops, or by adopting "other adequate appliances recommended *ad nauseam*." The witness quoted an extract from his report of May, 1868, upon the collapse of two Cornish boilers which happened in that month "in the neighbourhood of the Land's End." The report had been copied into papers in Cornwall. "Yet (adds Mr. FLETCHER), since the insertion of those remarks in the Cornish papers, explosion after explosion has continued to occur in Cornwall, simply from the collapse of furnace-tubes, which might have been prevented by the adoption of the hoops recommended."

We confess to a feeling a little akin to pain at a necessity for such

testimony upon our ancient mining county in the West. It is most earnestly to be desired that cause for such testimony by men of Mr. FLETCHER'S class should cease to exist. Why is the attempt continued to compel boilers to do work for which they have not the strength, when the requisite strength is so easily within reach? The subject should interest the mine adventurers who have to pay for the damage resulting from this want of study of the true principles upon which the construction of such boilers should be based; and the captains might well enquire why Sir WILLIAM FAIRBAIRN'S rules, accepted elsewhere, are not applied in Cornwall. The inference, we fear, deducible from the facts in respect to the Wheal Frances boiler are that there are others working within an inch of their lives, and that they may be expected soon to break down. If there should be no timely alteration upon the state of things to which Mr. FLETCHER drew the attention of the Select Committee, what Cornwall is neglecting to do may bring down Government inspection on all the rest of the country, notwithstanding that out of Cornwall steam users are general striving to do the inspection themselves.

THE CANNOCK CHASE COLLIERY DISTRICT.

An interesting mining discovery was some short time since made upon Cannock Chase. By many persons this district of Staffordshire is supposed to have been begun to be mined with vigour only very recently. Such a view is erroneous. As far back as 200 years ago the "old men" were at work in that district, and, according to their ability, they worked it extensively. From the vicinity of Hednesford and the west part of the Chase proper, thence to Cannock and Leacroft, and still on through the Wyrley district and Essington Wood, they took as much of the upper series of coals as their knowledge of mining enabled them to get out. Their facilities depended upon the means of drainage. Their habit was to carry water levels, which emptied themselves into the brooks of the various districts through which the "mines" passed. Thus they could work only such seams as these drains emptied, for it is hardly necessary for us to say that pumping-engines were at this time unknown. Before, however, these old men gave up they had attained a knowledge of draining by pump, after a fashion, and so got down more in the dip of the seam. At one time a pumping-engine stood within ¼ mile of Holly Bank farmhouse, in the district now under mention, which had the boiler under the cylinder, and the pump-trees, so called, were of the spigot and faucet joint, similar to our wooden pumps of the present day. The colliery, now in the possession of the Messrs. MCCLEAN and Co., was commenced about 20 years ago, close up to the ribs or boundary of Mr. HANBURY'S colliery workings at Brownhills, and which were, doubtless, in operation on that side of the estate 40 or 50 years ago, thus showing that the Cannock Chase collieries are a continuation of the original Brownhills working of the shallow and deep coals, the commencement of which date as far back as the year 1800 at least, and are still in active operation.

Most light upon the early workings of the old men hereabouts was thrown by the discovery to which we have alluded. At the Hednesford Colliery, just purchased from Messrs. PIGGOTT and TREDWELL by the Cannock Chase Colliery Company, whilst the firm were searching for clay for brick and tile manufacture as much as 100 yards of the old men's workings were come upon 9 ft. from the surface soil. Here throughout its entire length there stood the props, or trees, and lids erect in the positions in which the old men had reared them; and, considering the length of time they had been underground, in a tolerably sound condition. A system of long wall colliery working we here see was adopted here in all its entirety as far back as a century and a half, or two centuries. And it is not a little interesting further that chief amongst the workers of that date were the ancestors of the present Government Inspector of Mines for South Staffordshire and East Worcestershire. These were a family of the name of BENTON, who had come over from Germany, and settled thereabouts. Thus, in all probability before CHARLES II. apologised to his courtiers for being so unconscionable a time in dying, before PENN sailed in the Welcome for the New World, and before the east wind, for which the Londoners had been praying, bore the fleet of WILLIAM III. prosperously towards our English shores, these men had settled in South Staffordshire, had found treasures which are only now being completely developed; and while from Swansea and Neath coal, the produce of the South Wales field, was being sent to Somersetshire, Devonshire, Cornwall, and Ireland, they were getting mineral fuel for the neighbouring ancient borough of Walsall, and, probably, sending it likewise to a village not many miles off, now known as the great midland town of Birmingham. The BAKERS had early become allied with the BENTONS, and the Inspector's great-grandfather, who died an octogenarian, was possessed of extensive mining lore, inherited from his forefathers. The Inspector's father—the late Mr. PHILLIP BAKER, of Landywood—was the gentleman of that name to whom the late Prof. JUKES expresses his obligation for information on the Hednesford, Wyrley, Pelsall, and Brownhills localities in his Memoir on the Geology of the South Staffordshire Coal Field; and but for Mr. BAKER'S death letters in the possession of the Inspector show that Mr. JUKES would have obtained further local facts of value from the same source. It was Mr. BAKER'S confirmed opinion that the Chase and Hednesford, and the district north-west of Brownhills, would turn out all that it is now proving by the aid of deep sinkings and the improved machinery of modern times. Inheriting the belief from his ancestors, he confirmed it by very frequent professional perambulations of the district, assisted in later times by his son, who speaks with pleasure of the many days he spent with his father exploring and taking surface levels of the outcrop of the various seams of coal. Mr. PHILLIP BAKER was almost, if not quite, alone amongst the mining agents of his day in the opinion which he held; nevertheless, he stoutly maintained that the Brownhills coals would be found underlying the upper coals of the Wyrley, Cannock, and Hednesford district. More than 30 years ago Mr. PHILLIP BAKER made a plan (now in the possession of the Inspector) of an engine for pumping, to be used in the sinking of a pair of shafts at Wyrley to prove the measures below the Wyrley Bottom coal, and the shaft was intended to have been carried down at least 300 yards. The sinking was to take place at Mr. GILPIN'S Old Colliery, at Wyrley, but the death of Mr. GILPIN prevented the scheme from being at that time carried out.

The Inspector himself was as certain as his father had been as to the deep-lying measures. As recently, perhaps, as ten years ago, colliery representatives still doubted the accuracy of such opinions, when, upon visiting in his official capacity one of the principal collieries in that portion of his district, the Inspector assured the proprietor that the Brownhills coals would be found underlying those he was then working. Sinkings were, however, soon after begun and proceeded with, till presently all that had been foretold was duly uncovered, and an impetus thereby given to mining operations thereabouts, which the new railways have immensely fostered, and that will prove a great boon to the different consuming markets over a wide portion of the kingdom. Sinkings of more or less value yet remain to be made throughout the Wyrley, Cannock, and Hednesford district; and it is by no means improbable that either the Brownhills or else the Bloxwich "mines" will be found underlying the Essington district, further south.

CAUTION TO COLLIERY OWNERS AND COLLIERS.—The Editor of the late "As. Met. Journal" (under date West Melton, Nov. 15) writes—I have reason to believe that a very dangerous time for persons engaged in and about coal mines is near at hand, which will extend over three or four days, and as I conceive it to be a duty I should not feel justified in avoiding, I use the privilege of addressing a word of caution to colliery owners and workmen, through the pages of your largely circulated journal. From the night of Friday, 18th, to the Monday following, at daylight, I expect sudden changes of temperature and of barometric pressure, and these, as I have before shown, are almost immediately followed by large escapes of gas; and I wish further to call attention to the fact, that those sudden reductions of atmospheric pressure we may very properly ascribe the frightful accidents from the falling of unsound roofs, which have latterly been so common and so fatal in their results. Such places, just able to support themselves under ordinary pressure, suddenly lose two or three pounds per square inch of supporting power, and any gases which may be pent up above them proportionately expand, and, assisting the gravitating force of the ponderous material, hurl it to the floor of the mine, without previous warning. This, as colliers well know, is very different to a fall of coal, which generally gives some intimation of its approach, by the 'creep, creep,' which precedes the fall, so familiar to the working miner. With the best intentions, I would, therefore, caution managers of coal mines to watch carefully the fluctuations of the barometer and thermometer on the above eventful days, and look well that no more gas is liberated than the means of ventilation are sufficient to sweep out of the workings. Let the air courses be diligently examined, that any stoppages occasioned by large falls may speedily be cleared away. In addition to the above times of danger, unsound roofs may be expected to give way about midnight on Monday next. That the above warning may be productive of good results to those whom it concerns is my earnest wish.

THE SOUTH AFRICAN DIAMOND FIELDS.—The diggings are situated in the region watered by the Vaal, and especially at Klipdrift, near Poreil. The rocks are chiefly trappean, metamorphic, and conglomerate in character, pure granite absent, but syenite forms the base of the whole system of rocks about Klipdrift. On the summit of the kopjes are isolated boulders, consisting solely of quartz, and large crystals of felspar—in some of the kopjes are remains of stratified rocks. On the summits of the kopjes, and in the crevices between the basaltic boulders, is an alluvial gravel, and it is in this that the diamonds are found. The pebbles of sandstone, quartzite, crystalline sandstone, granite, clay-slate, agate, tourmaline, iron pyrites, garnet, garnet-spinel, &c., which compose this alluvian, are all rounded, polished, and water-worn, and are embedded, at Klipdrift, in a brownish fatty earth. It is considered that the present bed of the Vaal cannot be an old one, and that the whole surface of country, as far as the alluvial soil extends, was at different previous times under the wearing and breaking influence of the river.

EXPORTS OF WROUGHT-IRON.—The exports of wrought-iron from the United Kingdom in September amounted to 12,350 tons, against 12,667 tons in September, 1869, and 14,656 tons in September, 1868. The largest deliveries were made to Russia, British America, and British India. In the nine months ending Sept. 30 this year the aggregate exports of wrought-iron amounted to 101,074 tons, against 100,190 tons in the corresponding period of 1869, and 93,268 tons in the corresponding period of 1868. The largest consumer of our wrought-iron was British India, which took 15,921 tons to Sept. 30 this year, against 10,810 tons in the corresponding period of 1869, and 29,221 tons in the corresponding period of 1868. The exports have increased this year to Russia, France, Spain, British America, South Africa, and British India; but they have decreased to Prussia, the Hanse Towns, Holland, the United States, and Australia. The value of the exports of wrought-iron in September was 228,042*l.*, against 236,132*l.* in September, 1869, and 249,396*l.* in September, 1868; and in the nine months ending Sept. 30 this year 1,897,927*l.*, against 1,803,580*l.* in the corresponding period of 1869, and 1,672,652*l.* in the corresponding period of 1868.

THE METAL TRADE.—Though this country abounds in metalliferous deposits, we, nevertheless, draw freely upon the mineral wealth of other climes to supplement our wants. The import trade in metals and metallic ores is not an insignificant one, since it is valued at 5,000,000*l.* a year, or thereabouts. The quantity of metal imported into the United Kingdom during the half-years ended with Midsummer was—

		1868.	1869.	1870.
Copper ore	Tons	31,000	27,000	25,000
Copper regulus	,,	14,000	15,000	20,000
Copper unwrought and part wrought	Cwts.	293,000	249,000	251,000
Iron in bars	Tons	13,000	19,000	18,000
Steel, unwrought	,,	2,000	3,000	3,000
Iron and steel, wrought	Cwts.	79,000	105,000	112,000
Lead, pig, and sheet	Tons	19,000	23,000	26,000
Zinc	,,	11,000	15,000	10,000
Tin in blocks, &c.	Cwts.	29,000	33,000	37,000
Pyrites of iron and copper	Tons	108,000	134,000	210,000
Quicksilver	Lbs.	606,900	1,061,000	1,121,000

The importation of one kind of copper and the other was rather below the average, especially in the unwrought and partly wrought sorts. Iron and lead came in large quantities. The supply of foreign tin has been large, a fact unpleasantly realised in Cornish enterprise. The shipments of quicksilver were 288,000 lbs. over the average of 1868 and 1869, half-years. The value of these imports, or rather the majority of them, is shown below:—

	1868,	1869,	1870,
Copper ores	£424,000	£351,000	£296,000
Copper regulus	472,000	474,000	588,000
Iron, in bars or unwrought	125,000	171,000	155,000
Iron and steel wrought	157,000	173,000	173,000
Lead, pig and sheet	343,000	420,000	458,000
Zinc	263,000	291,000	209,000
Tin	135,000	216,000	232,000
Silver ore	85,000	71,000	57,000

Measured by money, the trade has been very steady. Taking the half-years in succession, its value was 2,008,000*l.*, 2,167,000*l.*, and 2,168,000*l.*

LANCASHIRE AND CUMBERLAND IRON TRADE.—There is a growing demand for coke on account of the North Lancashire and Cumberland Hematite Iron Trade, which is developing at an almost prodigious rate. A gentleman in the trade, who has just visited the district, says that arrangements are being made to add to the production of pig metal on a large scale. A large blast-furnace at Barrow and another at Comforth are approaching completion. Another is being erected at Askam, and a fifth at Millom. Messrs. Gilmore and Co. are adding three furnaces at Maryport, whilst others are being erected for the Solway Company. There is a great demand for Bessemer pig metal, Nos. 1 and 2, owing to the growth of the large manufacture of iron and steel rails and plates, conducted by the Bessemer process, that manufacture having largely increased since the reduction of the royalty on the patent. The Barrow Company are adding new steel rail and plate mills, which, it is stated, will increase their production in that class of trade by 50 per cent. At Comforth also a new steel rail mill is being erected. Hematite ore has advanced largely in price, from 10s. per ton two or three years since to 14s. or 15s. per ton. There appears to be an important and promising future before the hematite iron districts.

WIRE-ROPE BRIDGE.—At the Institution of Mechanical Engineers, Mr. WM. HACKNEY, of Swansea, read a paper descriptive of a wire-rope bridge, at Landore Steel Works, for conveying materials across a navigable stream. This bridge has been erected as an inexpensive means of removing the spoil from excavations made in carrying out an extension of the Landore Siemens Steel Works, near Swansea, and depositing it on the low marshy ground at the other side of a navigable stream which runs by the side of the works; and it was a necessary condition that any structure thrown across the stream should be arranged so as not to interfere with the passage of vessels. The bridge is constructed of a pair of steel wire-ropes, stretched alongside each other across the stream, and sloping downwards from the higher bank on which the works are situated, to the lower ground on the opposite side, where the spoil is deposited. On each rope travels a runner, or small carriage mounted on a pair of grooved wheels, from which the trucks are suspended by chains; and the two runners are connected together by an endless wire-cord passing round a pulley on each bank, so that the loaded truck running down from the higher bank on one of the ropes draws up an empty truck from the lower bank on the other rope, the inclination of the ropes being sufficient for this purpose; the speed is regulated if necessary by a break upon the cord pulley. The ropes are strained over abutments on either bank, and attached by chains to anchorages in the ground; and in order to admit of the passage of vessels in the stream, the abutment on the upper bank is constructed of a timber framing mounted on wheels, which can be run forwards through a sufficient distance to allow of the wire-ropes being lowered to the bottom of the bed of the stream, so that the whole bridge is then completely out of the way of passing vessels. For raising the bridge again, the movable abutment is drawn backwards by a hand winch, until the ropes are hauled up nearly tight; the hauling chains are then hooked to the anchorages by screw couplings, by which the ropes are finally tightened up, and the hand winch is thus relieved from all strain during the working of the bridge. In this way the bridge is raised into its working position in the course of a few minutes by a couple of men at the upper end. Owing to the curve in which the wire-ropes hang, their inclination is steepest close to the upper bank, thus retarding the speed of both trucks as they approach the landings on either bank, and serving generally to stop them, without the use of the break. This bridge has now been in constant use for several months, and has proved very satisfactory for the special purpose for which it was designed.

THE WARSOP AERO-STEAM ENGINE.—Mr. R. EATON, of Nottingham, read a paper descriptive of this engine at the Institution of Mechanical Engineers. The principle of the engine consists in injecting a continuous supply of heated air into the bottom of the boiler, whereby the water in the boiler is kept in a constant state of agitation throughout, and the result is found to be that the generation of steam is rendered more rapid, with considerable economy in the fuel consumed, while incrustation in the boiler and priming are prevented. The air, compressed to the boiler pressure by an air-pump, driven by the engine or by a separate donkey engine, is conveyed to the boiler through a set of heating pipes fixed in the boiler flues, and is thus heated to a temperature of about 600° Fahr. by heat which would otherwise escape to the chimney as waste; and it enters the boiler through a pipe extending along the entire length of the bottom of the boiler, and perforated on the underside with a series of small holes for distributing the air throughout the water in the boiler. The quantity of air injected can be varied as desired, but the proportion found most suitable generally is 12 per cent. of the steam generated, the combined air and steam passing off to the engine. The plan has been tried principally with non-condensing engines at present; but the effect upon the vacuum in condensing engines is found to be a diminution of not more than 2 lbs. in the vacuum otherwise obtained with steam alone. An important result of the employment of air in this manner is the entire prevention of incrustation in the boiler; and this result has been fully established by the experience of the boilers worked on this plan. Comparative trials have been made for a length of time with stationary boilers fed with water containing a large amount of deposit, and also with marine boilers; and in every instance there has been an entire freedom from incrustation, while similar boilers, working under the same circumstances, but without the air injection, have become seriously incrusted with earthy or saline deposits, requiring frequent cleaning out. Another important advantage found to attend the use of the air injection is the prevention of priming; so completely is this prevented, that marine boilers working at high pressure are, with the air injection, worked at a considerably higher pressure of steam, and with a consequent higher speed of the engines, than is practicable without the air injection, on account of priming. The heated air injected into the boiler has moreover a direct evaporative action upon the water, equivalent to an increase of heating surface in the boiler; and this increase has an extra efficiency from the circumstance of the air being in direct contact with the water, instead of the heat being communicated through the medium of imperfectly-conducting metal plates.

REPORT FROM THE NORTH OF ENGLAND.

Middlesborough, Nov. 16.—The new railway projects of the North-Eastern Railway Company are naturally attracting considerable attention, and a great deal of interest is attaching to the new schemes, particularly that for opening up the collieries situate between Sunderland, Hartlepool, and Stockton, and reducing the distance between the Tyne and Middlesborough. Some few weeks ago attention was drawn, by one of the leading trade journals of the North, to the fact that, should the present bridge of the North-Eastern Company, which crosses the Tees above Stockton, and over which the whole of the coal and coke consumed in the Middlesborough district is brought, come to any misfortune, and thereby cause the stoppage of traffic—if only for two or three days, or it might be but a few hours—seeing that no stocks of these materials are kept, the entire of the works of the district would have to stand. The new scheme to bridge the Tees below Stockton, somewhere between Haverton Hill and Billingham, would provide against such a contingency—at least to a large extent; but it is stated that fuel will be delivered to Middlesborough and neighbourhood at a valuable reduction upon the present prices. The parliamentary notice of the various projects is being advertised. The bridging of the Tees, as proposed, is promised strong opposition from the Stockton people, inasmuch as it will, according to their statements, hinder vessels from going to Stockton; but as, on an average, only a vessel and a-half per day reaches that port, any slight interruption that might occur does not appear as if it would be of very serious moment. Then it is not proposed to place so severe an obstruction in the river, but to erect a large swing-bridge, which could be easily opened, so as to permit the passage of the largest vessel that could require to be sent to Stockton, without much difficulty. The Middlesborough community, on the other hand, warmly advocate the construction of the railways, and the erection of the bridge. The Tees Conservancy Commissioners had the question under consideration on Monday, and resolved to visit Goole, in order to see the bridge belonging to the railway company, which crosses the arm of the Humber, as the one proposed for the Tees is to be on the same plan.

There was a fair attendance on 'Change on Tuesday. Prices for pig-iron were the same as last week (say) 48s. 6d., No. 1; 46s. 6d., No. 3; 45s., No. 4, net cash, f.o.b. the Tees, or on trucks at makers' works. There was not much business done. A few sales were effected, but of no moment. Shipments have been interfered with lately by the stormy weather, but with its abatement deliveries by water are very good. For railway iron the demand is somewhat better; the rumours respecting Russia and the Treaty of 1856, however, caused an uneasiness on the market, and will retard the closing of contracts for any forward period. The mills throughout the district are generally pretty well employed, but one or two firms have lately run only broken time. Prices for finished iron are not reported to be lower this week. Plates are in brisker requirement, but for bars enquiry is slacker. It is rumoured that the erection of new rolling-mills is contemplated, on a site situated on the north bank of the Tees, at Stockton, immediately opposite the works of the North Yorkshire Iron Company. Messrs. W. C. Holmes and Co., of Huddersfield, will be the engineers.

The South Durham pits are generally making full time. The erection of the coke-ovens at different places in the district—particulars of which we gave the other week—are being rapidly pressed forward. Next year's contracts for coke have been mostly closed, and for coals also. Prices for both have, as a rule, been improved. A serious accident occurred at Messrs. Pease's Adelaide Pit last week. When drawing water on the Sunday, an 800-gallon tub was precipitated down the shaft, carrying all the timber in the shaft with it to the bottom. Work was only resumed on Monday, after a stoppage of seven or eight days.

Mr. C. E. Muller, in his Circular, says—We have now 110 furnaces in blast; Messrs. Gilkes, Wilson, Pease, and Co. having blown in their two new ones recently. The make of the Cleveland district is now at the rate of a million and three quarter tons per annum. There are fifteen new furnaces building, and three furnaces re-building. The following are the usual returns for last month, compared with the corresponding month last year:—

	Production.	Shipments Foreign.	Shipments coastwise.	Warrant stores.
Oct. 31, 1870	148,063	15,839	15,864	14,139
Oct. 31, 1869	129,483	17,420	9,520	37,632
Increase	18,580	Decrease 1,590	Increase 6,344	Decrease 23,493

The stocks in the month of October have increased 1415 tons, which is very trifling in face of the increased make. Shipments have gone on vigorously during the month, and owing to the large quantity taken by Germany, come very nearly up to the high figures of last year. I find the decrease in exports to France and Belgium is even more marked than last month. October decrease, 6835 tons; September decrease, 4736 tons.

	Holland and Germany.	France.	Belgium.
Oct., 1870	10,203	310	1,570
Oct., 1869	6,376	3,685	5,030
Increase	3,827	Decrease 3,375	Decrease 3,460

Holland and Germany included together in above comparison, as most of the iron imported into Rotterdam is sent up the Rhine into the interior of Germany

TRADE OF THE TYNE AND WEAR.

Nov. 16.—During the last week the Coal Trade has been rather flat, and many of the collieries working short time; this has been the case on the Tyne in the Steam Coal Trade, and also on the Wear in some places, but it is not at all general, and those most affected have worked four and five days per week. This temporary slackness has been mainly caused by severe weather on the coast, which has much impeded the movements of shipping, and has naturally also materially raised the freight. This sudden occurrence of extreme stormy weather so soon in November has considerably affected the progress of trade throughout this district. It is, however, not at all probable that strong gales will long continue; indeed, the wind has moderated much already, while the continuance of cold weather must have a beneficial effect on the House Coal Trade.

The movement for the weekly payment of wages does not appear to make much progress. A special delegate meeting was held on Saturday, to receive answers to circulars sent them on Oct. 22, requesting a decisive answer to the question. What is very remarkable, only one firm, that of Sir William Armstrong, sent any reply. It was, therefore, unanimously resolved in consequence, "That as a united request to the employers had unfortunately failed to elicit a satisfactory reply, the workmen of every firm be requested to form deputations to wait on their employers, and send their representative, with whatever reply they may receive, to an adjourned meeting on Saturday, Nov. 26th, when the future course of action will be decided upon.

Several boring-machines, and also coal-cutting machines, have been offered here lately to colliery proprietors, and the boring-machines are likely to come into considerable practice soon; the success of the coal-cutting machines, however, has not hitherto been great. It is remarkable that in the West of Scotland these machines have succeeded to a considerable extent—that is, both boring and coal-cutting machines—and the latter are, we are informed, being introduced in considerable numbers. Perhaps some of your correspondents in Scotland can give reliable information respecting the working of these machines, and the best kinds yet introduced.

The importance of the railway schemes so readily and energetically taken up by the North-Eastern Railway Company cannot be overrated; the effect on the success of the collieries and towns on the route must be very beneficial, and are really of great importance to the whole district. The great towns of Sunderland, Hartlepool, and Middlesborough are especially interested in the matter, and the opinions and feelings of all the parties concerned appear to be in perfect unison, with one exception, and that is with respect to the bridge for crossing the Tees near Middlesborough, and on this point there appears to be some jealousy on the part of the Stockton people, as they seem inclined to offer some opposition to the construction of this bridge, alleging that it will prove obstructive to shipping passing up the Tees to Stockton. This opposition, however, cannot be expected to be very formidable, as a properly constructed drawbridge can form no source of obstruction to the shipping passing above that point in the Tees. The number of vessels, indeed, is said to be comparatively inconsiderable. The parliamentary notice of the North-Eastern Company refers chiefly to an improved communication among the various lines lying east of the

main line in the districts of Sunderland, Middlesborough, and Stockton. The first notice refers to an intention to seek powers to form a line from Melmerby to Masham, in Yoredale, being the southern portion of the abandoned Hawes and Melmerby Railway. Another railway for which notice has been given is to commence in the parish of Monkwearmouth, in the passenger station of that branch, and to terminate at Ryhope, in a junction with the Durham and Sunderland branch line. Another railway commences at Copon, in the parish of Billingham, Durham, by a junction with the West Hartlepool line, and terminates in the township of Linthorpe, near Middlesborough, by a junction with the Stockton and Middlesborough line. Powers are also to be sought to alter the levels of part of the Pensher branch, to purchase additional lands, and to make tolls on coals conveyed on the North Shields Railway for shipment, for further powers as to the purchase of the Hull and Selby Railway, for additional capital, amendment of Acts, and for other purposes.

Another project has been brought prominently forward this week, which has been long talked of here—that is, the formation of a railway from Scotswood, through Newburn, and other places westward, and forming a junction with the North-Eastern system again at Wylam; and also the construction of a dock at Scotswood. The execution of this project, which could only be made feasible by the erection of a bridge providing for the passage of vessels at Newcastle, will effect quite a revolution in the coal trade west of Newcastle. At present most of the coals, coke, and fire-bricks produced in this west district are brought down the Tyne in lighters for shipment at the staiths and docks at the lower part of the river, but if the docks and railway at Scotswood are constructed most of these products will be shipped there, and thus cut off a great expense now incurred by those coals before being put on shipboard.

The Engine and Foundry Trade continues, on the whole, good, most of the works being well employed, and many of the engine works especially are full of orders. The Iron Shipbuilding Trade also continues good, and in the iron trade generally a good business is being done, and, on the whole, prices have hardened a little for some kinds of iron, and stocks have decreased a little. The failure of the peace negociations, however, and the awkward rumours respecting Russia, have had a very depressing effect on business during the past few days. It appears, however, that the prospect for trade in iron with America is very good, and if peace were once established on the Continent there is little doubt that an excellent trade in coal and iron would be experienced.

A Polytechnic Exhibition has been opened in the Central Exchange News Room, Newcastle, and, in addition to works of art, of which there is a large collection of various kinds, there are models of pumping machinery, a saw-mill, and other machines; and, what is certain to prove a great attraction to miners, geologists, &c., there is a very good collection of fossils, many of them having been collected and arranged by Mr. Barkas, and many specimens of considerable interest are included from the coal strata of Northumberland.

REPORT FROM SCOTLAND.

Nov. 16.—The overcasting of the political horizon has again clouded the prospects of the Pig-Iron Market, and prices have given way 4½d. a ton. This, in the face of improved shipments, evinces the fears of our merchants and moneyed men in the political future. And yet, when one recalls the financial condition of the nations of Europe, all so crippled by recent incisive and decimating wars, it is difficult to see that any serious or prolonged injury could be done to our commercial relations. The shipments of pig-iron for the week just ended were 10,357 tons, against 8131 tons in the same week of 1869. On Monday the market was inactive, with business done at 51s. 3d. down to 51s. cash, and 51s. 4½d. a month; yesterday the tone was better, with no improvement in price. The market was excessively flat—opening at 51s. cash in a few days, and business was done down to 50s. 9d. cash, when a large business was done, closing sellers over; 51s., 30 days. No. 1, g.m.b., 51s. 6d.; No. 3, 51s. Coltness, 61s.; Coatbridge, 60s.; Calder, 60s.; Summerlee, 58s.; Shotts, 57s.; Clyde (Quarter), 55s.; Eglinton, 52s. 6d. The demand for merchant iron has not varied during the week, and the new specifications offering are not numerous. Blochairn, Glasgow, Govan, and North British brands are 8*l.*; Monkland, 7*l.* 15s.; Clifton, Coats, and Drumpeller, 7*l.* 12s. 6d.; the other brands, 7*l.* 10s. Nail rods, 8*l.*; rails, 8*l.* to 8*l.* 5s.; plates (ship), 9*l.* to 9*l.* 5s.; boiler, 10*l.* to 15*l.* Foundries are generally busy, and the engineering establishments are well off for orders. The hearing of agents for the Scotch puddlers on the one side, and for the masters on the other, is to be resumed on the 17th inst., after which the arbitor will give his decision. Our exports include heavy shipments of pipes, and a high average of nail rods, rivet iron, and galvanised sheets.

Coals are scarce with some of the masters, on account of a deficiency of engine power on the Caledonian line to bring forward the output to market. This has had the tendency to stiffen prices, which are now quoted—Main, 7s.; and splint and soft, 7s. 6d. to 8s. per ton; burnt coal for steamers, 10s. per ton. The shipments from the Scotch ports during the week were 29,025 tons, against 19,700 tons in the corresponding week last year.

In the First Division of the Court of Session, on the 10th inst., the action in the case "Cowie *v.* Airdrie Mineral Oil Company (Limited)" was decided. In this action of damages the purser, George Cowie, coalmaster, Airdrie, obtained a verdict on July 29 for 550*l.* against the defenders. The ground of action was breach of contract by failure to take delivery of coal and shale from the pursuer in terms of agreement, the defenders pleading that the pursuer had not furnished minerals of the quality understood in the agreement. The defenders moved for a new trial in respect that the verdict was contrary to evidence, and having obtained a rule the Court discharged the rule, refusing a new trial.

At a meeting of the Glasgow Geological Society, Mr. J. Thomson, F.G.S., submitted some remains of fish and molluscan life, which he had recently discovered in the neighbouring coal fields, and which were new, at least to the West of Scotland. These were *Acanthoides Wardii*, from Airdrie; *Athyris pisum*, from Brockie; and *Anomia corrugata*, from Dairy. He pointed out the characteristics of these species, and describes the relative position of the beds in which their remains had been found.

Of the launches since last week on the Clyde we notice a fine screw steamer, named the Graf Bismark, 2450 tons, for the North German Lloyds, and intended to form one of the West Indian fleet of that company.

REPORTED DISCOVERY OF GOLD IN CAITHNESS.—A correspondent at Thurso writes:—"There are reports of gold being found in Caithness, but it is feared the deposit is not in quantity, else the explorers would not have been so long silent on the subject. The place where traces of the precious ore have been found is Strathmore, the property of Sir Tollemache Sinclair, M.P.; and if Caithness were fortunate enough in this respect, Sir Tollemache would give every facility to parties to try their luck. The projected railway will traverse that part of the moorland district, and, perhaps, the cuttings will discover what the most sanguine in the county has never dreamed of. Fifty years has not elapsed yet since the discovery of our pavement quarries. The amount of money realised from this one branch of business has been very great, and it is a singular fact that the land in which the stratum of pavement is embedded is comparatively valueless—the surface unsuited for agricultural purposes, and very little worth for pasture. The discovery of pavement gave an almost fabulous value to these rock deposits, and a few years ago about 750*l.* was given for about one and a quarter acre, the land reverting back to the original proprietor after the pavement was quarried out. Valuable as the pavement trade is, and has been for supplying the labouring population with work, it is the general impression that the county is too dependent on this one branch of employment, and that were railway extension once carried to the *ultima thule* of the mainland other branches of industry would spring up, and add to the prosperity of the county."

REPORT FROM THE FOREST OF DEAN.

The general trade of this district is in quite as flourishing a condition as when we last reported. Persons directly connected with mining affairs are aware that the changes which take place from one week to another are too insignificant to call for, or justify, comment. There is a great deal of dissatisfaction felt all through the district in consequence of the injury done to the mining interest from the dabbling of uninformed persons, who engage to furnish one-sided reports in order to please a small party, whose interests are conflicting that of the majority. It has been said, and it is undoubtedly true, that no persons are so well qualified to represent the mining interests of a district as those who have had long experience in such matters, but, unfortunately, there are many others who may be made to say or write in a certain way for pay only, and it is well known that this district has suffered severely by the misrepresentations of such. We need go no further than the Bowson Colliery Company for a proof of the very lax way in which their doings are reported. It has been said by some of these persons that the water which has been attempted to be dealt with there is an "influx," and again an "inflow," inferring that an internal supply comes in from some unknown reservoir; but, if they are capable, why not state where it does come from, and also the whole facts of the case in connection with the bad and ruinous management carried on there? Then, again, is 800 or 900 gallons per minute to be considered in the light of an inexhaustible quantity? an assertion which must be negatived by all practical and honest-minded men. But there is reason to fear that personal interest and profit go far in drawing assistance from others in endeavouring to cover up incapacity, and, consequently, causing a false impression to be imbibed by the public. It is, indeed, deplorable for this district that things are so, and it is high time that the old Forest should be relieved from that cloud under which it has laboured so many years. It cannot be said that it is the district that is bad; no, just the contrary; but it is those who come here from other districts, and enter into engagements as managers, squander many thousands of pounds, smash up companies, abandon their ill laid out and unsuccessful winnings, leave the district, and then finally give it a bad name, when, at the same time, it is well known that such works might have been successfully planned and developed at one-quarter the outlay if proper persons, having a thorough knowledge of the district, had been consulted. There are so many examples of the ignorant and reckless way in which money has been spent that the time has come when such matters ought not any longer to be concealed, and we hope at a future day to give the history of some such doings.

The all-engrossing topics just now are railways for the district, and a new Act of Parliament for the future regulations of the opening and working of mines. The colliery proprietors here seem disposed to form themselves into a company for the purpose of laying down a narrow-gauge railway, commencing at the northern terminus of the Whimsey branch of the Great Western Railway Company's Forest of Dean Railway, passing through the several parishes, townships, and places of East Dean, Ruardean, Mitcheldean, and Lea Bailey, in the county of Gloucester, and Hopemansell, Lea, and Hounall, in the county of Hereford, to join by a junction with the Hereford, Ross, and Gloucester Railway of the Great Western Railway Company, at or near their Mitcheldean Road Station. It is intended to apply to Parliament in the ensuing session for a Bill for this railway. The Severn and Wye Railway Company have, however, already obtained a Bill for a railway traversing the district, and arriving at the same point of junction as the above. There does not, therefore, seem to be any need for this new line of railway, as the latter company intends giving every facility to the proprietors of the different collieries by a new outlet for this part of the Forest, which their line would give. A strong opposition may consequently be expected against this new project. The proposed new Act for regulating mines to be applied for in the sessions of 1871, of which the Crown has given notice, has arisen out of the strong opposition exhibited by the Mining Defence Association against the Crown, and no doubt every clause will be strongly contested by the opposing element on behalf of the Association in Parliament.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

Nov. 17.—There has been little change in the business doing at the iron works in North and South Derbyshire during the week. The production of Pig-Iron is still large, and will be considerably increased, as several new furnaces will shortly be blown-in. At Sheepbridge, Staveley, Wingerworth, and at the works of the Erewash Valley line, large quantities are being produced, whilst there is also a fair demand for the manufactured material, whilst the mills are kept fairly going. The Coal Trade is not what may be termed active, and some of the collieries connected with the largest establishments are now working short time, a not usual occurrence at this season of the year. There is little doubt but the traffic in coal to London from Derbyshire has been checked by the action taken by the South Yorkshire colliery proprietors, in selling their produce at a reduction of 2*s.* per ton. This, however, is not likely to last, but so long as it does continue it cannot be expected that the London consumers are likely to pay 2*s.* more per ton of coal than they are obliged when qualities are at least equal. There has not been much alteration with regard to steam coal, and no news as yet has been received as to the ice appearing in the upper ports of the Baltic.

The heavy branches of the Sheffield Trade continue busy, and with every appearance of being so for some time to come. Heavy armour-plates are still being largely produced, and the recent declaration of the Emperor of Russia, that he will not be bound by the Treaty he entered into with the European powers after the Crimean war, is likely to still further increase the demand for them, seeing that armour-plated ships will play the most important part in any war in which England will be engaged. Other powers, signatures to the Treaty, are not likely to be deluded by the quiet manner in which Russia has made known what she intends doing, or the time she has chosen for making it known, so that there is not the slightest doubt but the navys of Europe will be largely increased, and that as soon as possible. For some time past a good business has been done in steel guns, gun-blocks, and everything, in fact, in any way connected with warlike operations. Makers of railway material, from locomotives to springs, have been busy for some time, and there is still some considerable orders in hand for rails and other descriptions of railway material, both for home consumption and shipment. Some very large contracts for steel and iron rails, and their accompaniments, have been opened during the last few days, and it is by no means improbable that some of them will find their way into this district. In the Rotherham district business continues steady, the workmen being kept well employed. There is no change with regard to the business doing in Coal, the demand for house qualities being rather improved. At Chapeltown and Thorncliffe, where the Ironworks of Messrs. Newton, Chambers, and Co. are situate, there is a fair demand for various qualities of pipe and gas material, as well as general castings. The collieries belonging to the firm are kept fairly going, a large number of men being employed, both Unionist and non-Unionist.

The Coal Trade in South Yorkshire is far from being in that healthy state which could be desired, and there does not appear any immediate prospect of its being materially altered for the better. The business now doing with London cannot be said to be other than a disadvantage to those engaged in it. The owners having agreed to reduce the price of this material to the extent of 1*s.* per ton, find that they are working, if not at a positive loss, without any gain. It is well known that 1*s.* a ton would be considered a large profit indeed, but we have it on the authority of one of the largest colliery proprietors that during last year he did not realise 1d. a ton profit, and such was the case with many other proprietors. It remains, however, to be seen whether the Great Northern will make a genuine effort to come to terms with the Midland, as the latter is stated to be desirous to make an amicable arrangement with regard to the traffic rate by the respective lines. The Great Northern, however, for some reason unknown, appear to be cultivating the trade from the North of England, and which is brought to it by the North-Eastern Railway. In Steam Coal there is not much change, and a considerable tonnage is being sent to Hull and Grimsby, shipments to the North of Europe being continued. During the week also a rather heavy tonnage has been sent to Goole, from which several cargoes have been dispatched to London, Maidstone, Wisbeach, and other home ports. A little more has also been done in engine fuel and ordinary coal with Lancashire, whilst the iron works in North Lincolnshire are taking large quantities of hard coal and coke for the use of the furnaces there.

CELEBRATION OF THE OPENING OF A NEW COLLIERY NEAR ALFRETON.—Tuesday was a gay day at South Normanton and Blackwell, on the occasion of turning the first sod of a colliery works, which will form part of a very extensive mining enterprise. Mr. E. M. Bainbridge and Mr. Wm. Muschamp, two great colliery proprietors in the North of England, have secured leases of the coal under about 3000 acres of land, and it is intended to prosecute the development of this extensive field with vigour, and the sinkings are expected to extend to a considerable depth. The workings will be under the direction of Mr. John Thomas Boot, mining engineer, of Hucknall Torkard, who has made all the necessary preparations for winning the coal. The quality of the coal is said to be superior. It will be conveyed to the Erewash Valley Railway by private line. On Tuesday morning the churches of South Normanton and Blackwell were gaily decorated with flags and evergreens, and the bells rang forth jubilant peals in honour of the occasion, and large numbers of the inhabitants made their way to the field occupied by Mr. Sampson, west of Ford Bridge lane, the placed fixed for the ceremony. Flags were displayed in large numbers, bearing appropriate devices. Shortly before eleven o'clock three carriages left the George Hotel, Alfreton, containing amongst others the proprietors of the collieries, Mr. Evans, Government Inspector, Mr. Coke, Chesterfield, Mr. Fenwick, Durham, Mr. Gilchrist, Durham, Mr. E. Bainbridge, Mr. Wm. Wilson, Alfreton, and Mr. G. W. Wilson, Alfreton. On the way to the field they were met by the Hucknall brass band, and a crowd of the inhabitants, who proceeded in orderly procession to the scene. Vociferous cheers greeted the arrival of the carriages. Admidst the enthusiastic plaudits of the assembly, Miss Bainbridge, daughter of one of the proprietors, took a light spade in hand, and, with the assistance of her father, cut and turned a piece of green sod. Cheering again followed, and Miss Bainbridge gracefully bowed her acknowledgements, at the same time declaring that the first sod had been duly turned. Mr. Bainbridge, Mr. Coke, and other gentlemen then offered appropriate observations upon the character of the undertaking, the former gentleman expressing a hope that while the collieries would be remunerative to himself and his partner, they would be beneficial to the inhabitants of the district as providing plenty of labour, and be useful to the world in furnishing a most necessary article. His remarks were warmly cheered. After the termination of the proceedings, about 40 gentlemen returned to the George Hotel, and sat down to a splendid dinner, provided by Mr. and Mrs. Cupitt. Mr. Bainbridge occupied the chair, and Mr. Muschamp the vice-chair. "Success to the collieries and their proprietors" was drunk with enthusiasm. Refreshments were freely provided in Alfreton for the men already engaged upon the works, and the kindness of Messrs. Bainbridge and Muschamp was highly appreciated.

At the Leeds Philosophical and Literary Society meeting, on Tuesday, Mr. Carruthers, F.G.S., of the British Museum, delivered a most instructive and interesting lecture "On the Vegetation of the Coal Period, and its relation to the Plants of the present day." From his intimate knowledge of the structure of living plants he ably demonstrated the relation of the plants which covered the earth prior to the coal deposit to those with which we are now familiar. Having glanced at the principal families of cryptogamous plants in which a vascular system is present, and which alone have left their enduring remains in the coal fields, consisting of the equisetums and ferns, the lycopodiums and the quilworts, which are all more or less inhabitants of damp situations, the lecturer demonstrated, by the aid of large diagrams, specimens of fossil plants from the society's museum. That the calamites were nothing more or less than gigantic equisetaceæ (horse-tails), and that the fossil plants previously described under the generic names of pinnularia, asterophyllites, and favosites, were only the roots and foliage of the calamites. That the lepidodendrons were gigantic club-mosses (lycopodiaceæ), rising above ground, the roots of which were stigmaria, and that sigillaria was also an analogous form of the same family. The accuracy of Mr. Carruther's deductions was clearly shown by the almost identical form of the fruits or sphores of the fossil and recent plants, which had never before been so clearly determined. The lecturer also noticed the remarkable fact illustrating the enormous profusion of these plants at the coal period, that the better bed of coal near Halifax was almost entirely composed of the seed or sphores of the lycopodiaceæ, which doubtless materially contributed to the inflammable nature of this bed of coal, as we know that at the present day the same property enters largely into the composition of the sphores of the lycopodiaceæ, or club mosses of our moors.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

Nov. 17.—On the whole, the Iron Trade of these districts remains tolerably good, though the works are not all in full operation. There is a steady supply of orders, and the demand for plates for shipbuilding is better, and give a little impetus to the trade. The abrogation by Russia of the obligations of the Treaty of Paris has naturally excited no small amount of attention in the trade. In a commercial point of view any rupture with that power would be a great calamity to the iron trade. For a long period Russia has been a great consumer of British iron and machinery, and the further extension of railways in a country peculiarly needing them, from the great distances from the seaboard, and where their construction, from the low price of land and the flatness of the country, is easy, is sure to be very considerable. No doubt the weakness which the want of proper means of transport disclosed during the Crimean war has stimulated the construction of railways; but their great advantages secure their extension on commercial grounds. It is earnestly to be hoped that war may be avoided.

The triumph of the Democrats in the United States, whatever its political results may be, seems not unlikely to promote advances towards a Free Trade policy. It is already stated that the Free Traders are disposed to unite with the Democrats, and it is not unlikely that as the power in Congress of the South and West—whose interests go in the direction of a low tariff—increases there will be a further modification of the present high duties, which are unfavourable to the revenue, because they diminish importations. It is not improbable that the Republican party will be forced to take the Protection planks out of their platform, if they are to maintain their ascendancy. A reduced tariff in the United States would add immensely to our exports there, and of nothing more than iron and hardwares.

Wolverhampton and Birmingham are now greatly excited by the elections of members of School Boards. It is to be hoped that as soon as the strife is over those chosen will set to work to set up really efficient schools where they are needed, and, above all, to apply with care and discrimination, but with firmness, the compulsory principle, which is much needed. There can be little doubt that the extension of the Factory Acts to the iron and hardware trades did considerable mischief by preventing children from working, who merely left the factory for the streets, and did not resort to school. Everyone who has had experience is satisfied that compulsion is necessary in order to ensure that the children of a considerable proportion of the population shall attend school with any degree of regularity, and secure any real permanent mastery of the first rudiments of instruction. The application of the principle will require great prudence and care.

TESTIMONIAL TO CAPTAIN FREDERICK SMITH, OF THE PRIORY, DUDLEY.—We hear upon the best authority that a sum of something like 500 guineas has now been subscribed towards the very handsome testimonial provided for Capt. Smith by the employees of the Earl of Dudley. We have already intimated that the presentation will be made at a banquet in the public hall on Jan. 3 next, and we are now able to state that the noble earl has intimated to the committee through the honorary secretary (Mr. John Dudley) that it will afford him very great pleasure to preside on the occasion, and make the presentation on behalf of the subscribers. Great praise is due to the committee for the manner in which they have conducted the proceedings up to the present time, and general satisfaction is expressed in regard to the result of their labours. The honours to be showered upon Capt. Smith are, we should think, almost unprecedented in the annals of the iron trade.

The Dudley Correspondent of the *Wolverhampton Chronicle* writes:—

On the Brierley Hill side the mills and forges were kept fully at work during last week, and the output of finished iron must be considerable. The leading houses of the trade rigidly adhere to the list of prices—common bars at the works, 8*l.* per ton; best bars, 9*l.*; sheets, 9*l.* 10*s.*; doubles, 11*l.*; batten, 12*l.* 10*s.*; boiler-plates, 9*l.* 10*s.*; rods, 8*l.*; hoops, 9*l.*; gas strip, 8*l.* 10*s.*; and all other sorts in proportion. For second-class and more inferior productions it is not easy to fix the prices, as these are governed according to circumstances. For rails there are scarcely any orders in the district. What the condition of the trade may be if hostilities on the Continent should cease it is almost impossible to conjecture. It is thought by some that the iron trade generally would be brightened, from the fact that the stocks of finished iron in the hands of the merchants are far from being large. The orders which have been coming in for some time past have only been for immediate use, with some few exceptions. The puddlers, millmen, forgemen, shinglers, and rollers west of Dudley attend to their work very regularly, and seem to have no wish to establish another "Union" in the place of the one which is defunct. The requirements for thick coal are daily increasing, and it is with difficulty that the demand can be supplied. Now that the "wakes" are all over, there will be nothing to prevent the colliers from doing full time if they choose. The colliers do not feel inclined to make any further effort to raise the 500*l.* which their leaders proposed should be raised to be added to the Hartley Colliery balance of 2200*l.* towards establishing a fund for their benefit. The treasurer, up to the present time, has received only about 70*l.*, so that it is not unlikely the trustees will ultimately apply the amount they have in hand towards the support of the South Staffordshire Hospital.

REPORT FROM MONMOUTH AND SOUTH WALES.

Nov. 17.—The startling rumour in regard to the movement of Russia respecting the Treaty of 1856 has caused no little consternation in the Iron Trade. Such disregard as that empire seems now to show for the Paris Treaty is ominous of evil, and what little hope remained of improvement in business can scarcely now be said to exist at all. The prospect of Russia becoming a belligerent power must, indeed, be regarded as a very serious matter, involving, as it does, the prospect of losing one of the principal centres of demand. It is of especial moment to this district, Russia, as is well known, having long been one of the chief dependencies of the rail trade throughout the Principality, and, therefore, the probability of hostilities arising in that direction cannot fail to cause the greatest uneasiness. In other respects there is not much alteration to be noticed in the condition of the iron trade. As a rule, operations at the works are carried on with tolerable activity, so far; but, even with a continuance of the present demand, it cannot be expected that such animation can be evinced much longer. Rail orders have come to hand very slowly for the last three or four weeks, and it is with great difficulty that the ironmasters, who are now entirely dependent upon current business, are at all able to keep their mills employed on average time. At some of the works it must be admitted this cannot now be done, Cyfarthfa, for instance, one of the chief rail-producing establishments, having been obliged to restrict employment at the mills, and transfer the hands to other departments. The season has entirely closed for all the northern ports, both of Europe and America. Some Indian orders are coming to hand, but they are not large. The requirements of the United States continue limited, but future prospects are hopeful from that quarter. There is a fair amount of activity evinced in the home trade. Rails and accessories continue in request, and for plates and bridgework there is a good demand. Bars are also in average request. Pigs remain depressed, and prices are scarcely maintained. There is no improvement to be reported in the nail trade. For tin-plates the demand may be said to be without material alteration either way, but the further advance in the price of block tin has increased makers' difficulty. The profits on tin-plate manufacture are now undoubtedly very small.

The Steam Coal Trade does not show quite so much animation as was observed a week or two ago. The little improvement which then took place has been counteracted by the falling off in the demand from several of the French markets, and although large quantities are sent to some of the distant mail-packet stations, the aggregate clearances from the local ports do not show any improvement on the corresponding period of last year. Prices are maintained. House Coals are selling freely, as is usual at this time of the year.

The well-known Llantwit Collieries, which belonged to the late

Mr. Thomas Powell, of Caldra, whose tragic end in Abyssinia is a matter of history, are about to pass into new hands. A company has been started, with a nominal capital of 60,000*l.*, in 6000 shares of 10*l.* each. This company has commenced negociations for the purchase of Mr. Powell's collieries, as well as other collieries in the same neighbourhood; and they will have altogether a mineral estate of about 600 or 700 acres.

The colliery which is being opened in the Merthyr Valley, and called the Vale Pit, by Messrs. Nixon, has been stopped for the winter. This pit is being sunk close on the banks of the Taff, where it runs through a narrow part of the valley, and is frequently flooded during the winter months.

A new iron steam-ship, called the Cambria, has just been launched from the yard of Messrs. Parfitt and Jenkins, at Cardiff. The vessel was built for the Cardiff and Portishead Steam-Ship Company, and she is intended for trading between Cardiff and Bristol. She is 110 ft. in length, 20 ft. in breadth, and 9 ft. in depth. She is to be fitted with a pair of condensing steam-engines of 40-horse power, and adapted to carry cargo without the convenience of passengers being interfered with. The vessel and the machinery, which has also been manufactured by the same firm, are considered equal to any that have entered the port. It is understood that another similar vessel is to be built without delay by the same firm, and for the same company.

A petition has been presented for the winding up of the South Wales and Great Western Direct Railway Company. This was the company which was to have constructed the high level bridge over the Severn, and by which it was intended to so reduce the distance from South Wales to London as to enable the colliery proprietors of this district to compete successfully with the northern coal in the London markets.

The arrivals at Swansea include—Louise and Angele, from Bilboa, with 140 tons of iron ore, for Holway Brothers; Eclaire, from Santander, with 166 tons of iron ore, to order; Marie Therese, from Antwerp, with 140 tons of fire-clay, for Richardson and Walters; Thomas, from Antwerp, with 156 tons of fire-clay, for Richardson and Walters; Rosa Alba, from Rotterdam, with 145 tons of iron, for the Landore Steel Company; Marie, from Luba, with a cargo of timber, for T. Williams and Co.; Catherine, from Almeria, with 215 tons of esparto grass, for Elford, Williams, and Co., and 218 tons of copper ore, for A. Bell; Meteor, from Bilboa, with 402 tons of iron ore, for Cory, Brothers, and Co.; Jeune St. Vincent, from Santander, with 225 tons of zinc ore, to order; Pere Benjamin, from Bilboa, with 140 tons of zinc ore, for H. Bath and Son; Druid, from Drammen, with 372 tons of zinc ore, for Dillwyn and Co.; Admiral Cecile, from Bilboa, with 409 tons of iron ore, for J. Strick.

LEE MOOR CHINA-CLAY WORKS.—We are glad to hear that the Admiralty reports from Portsmouth, Chatham, Pembroke, &c., are unanimous in their opinion as to the excellence of the fire-bricks manufactured from Dartmoor china-clay as being worth far more than the North Country bricks; the fiercest fire has failed to make any impression on the Dartmoor bricks, and their relative value is nearly three to one. The West of England China-Clay Company were, we understand, next to Lee Moor in the competition.—*Western Morning News.*

ILLUMINATING GAS.—The object of the invention of Messrs. W. YOUNG and P. BRASH, Leith, is the application of tars to the manufacture of illuminating gas. To prepare them for this purpose the acid tar is placed in a suitable vessel (by preference, lined with lead) and boiled up with open steam. The condensed water from the steam combines with the acid and sinks to the bottom and is drawn off. The alkaline tar is then run in, and the whole of the tars again boiled up. In this way any acid that may be present is neutralised, and leaves the tars in a purified state floating on the surface of the solution of salts, alkali, and other matters (the alkali may be recovered by evaporation). The purified tar can now be used for gas making by mixing it with small coal, or by running it into the retorts after the charge of coal has been introduced, but it does not do so well to run it into the retorts in this state, as it is apt to choke up the running-in pipe with carbonaceous matter.

RUNNING METALS.—The invention of Mr. J. M. NAPIER, Lambeth, consists in the employment of a plunger of dimensions suited to the vessel containing the melted metal. This plunger is thrust into the vessel and displaces the metal, which rises around it and overflows at a spout or opening in the upper part of the vessel. As the plunger is forced further down into the vessel the metal will continue to run from it until the plunger reaches the bottom of the vessel. When the plunger is withdrawn the vessel may be again charged, either with metal to be melted in it, or with metal already in a state of fusion and supplied from other vessels.

EXCAVATING COAL.—The invention of Messrs. R. WINSTANLEY and W. BARKER, Manchester, consists, first, in the peculiar construction of the cutting-wheel, whereby the power is applied on its circumference. Second, in the application of a radial arm for supporting the cutting wheel, whereby the cutting wheel may be made to swivel on the fulcrum of the radial arm, and thus to cut its way into the face of the coal, or other mineral, to be excavated. Third, in an improved mode of connecting the cutters to the cutting wheel.

HOLLOWAY'S PILLS—STEADY CIRCULATION.—The most important essential to maintain health is regulating the flow throughout the system of pure arterial blood. Thence comes the bone, muscle, and all the components of man. It is most momentous to prevent the blood from becoming contaminated, which Holloway's purifying pills effectually accomplish. They are the best family medicine ever discovered, their operation is so sure, safe, and satisfactory. The most delicate female or child may take Holloway's pills with confidence and certainty of relief. They produce no pain, debility, or other drawback. The concurrent testimony of thousands have assigned to Holloway's pills the enviable position they have held in all quarters of the globe for more than the third of a century.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the WHEAL HOPE MINING COMPANY.—By an Order made by His Honor the Vice-Warden of the Stannaries, in the above matter, dated the 14th day of November, 1870, on the petition of Anne Wescomb, of the City of Exeter, in the county of Devon, the executrix of the last will and testament of the late Charles Wescomb, of the same place, the late purser of the above-named mining company, and as such executrix a contributory and creditor of the said company, IT WAS ORDERED that the said WHEAL HOPE MINING COMPANY should be WOUND-UP by this Court under the provisions of the Companies Act, 1862.
R. M. PAUL, Truro, Petitioner's Solicitor.
Dated Truro, 16th November, 1870.

In the Court of the Vice-Warden of the Stannaries.
Stannaries of Cornwall.

PURSUANT to a Decree made in the Cause of Thomas and Another *v.* Cocks, the CREDITORS in respect of COLBIGGAN MINE, in the parish of ROCHE, within the said Stannaries, are, on Saturday, the 26th day of November instant, at Eleven o'clock in the forenoon, TO COME IN AND PROVE THEIR DEBTS before the Registrar of the said Court, at his office, in Truro, or in default thereof they will be excluded the benefit of the said Decree.
HODGE, HOCKIN, AND MARRACK, Plaintiff's Solicitors, Truro.
Truro, November 16th, 1870.

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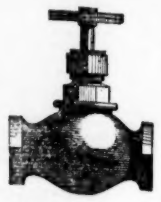

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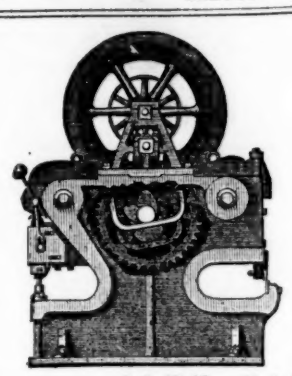

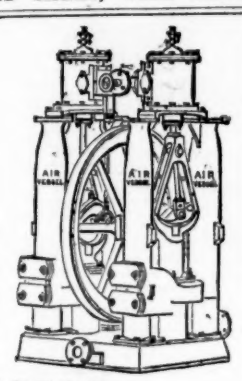

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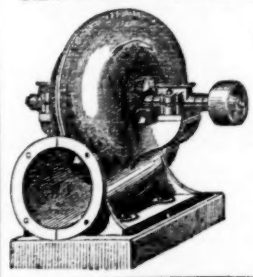

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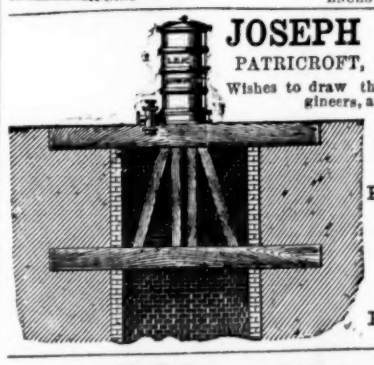

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Wishes to draw the attention of Mining Engineers, and others, to his
IMPROVED
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PUMPING
ENGINE.
Also, every description of
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AS MADE BY
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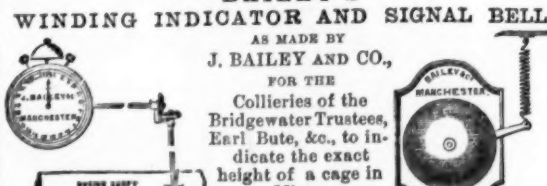
Collieries of the Bridgewater Trustees, Earl Bute, &c., to indicate the exact height of a cage in Mines.



Good and strong, price £4 4s.; worm and wheel, from 10s. to 30s. extra.
BAILEY'S SIGNAL BELLS, 7 in. 35s. each.
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BICKFORD'S PATENT SAFETY FUSE,

FOR CONVEYING FIRE TO THE
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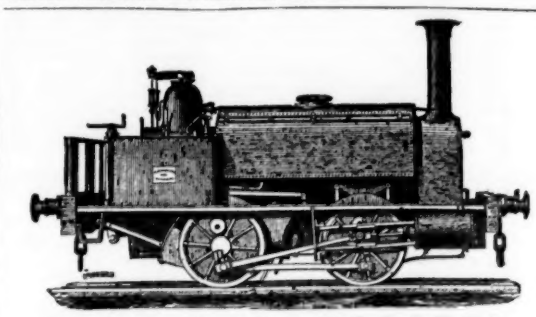
Obtained the PRIZE MEDALS at the "ROYAL EXHIBITION" of 1851; at the "INTERNATIONAL EXHIBITION" of 1862, in London; at the "IMPERIAL EXPOSITION" held in Paris, in 1855; at the "INTERNATIONAL EXHIBITION," in Dublin, 1865; at the "UNIVERSAL EXPOSITION," in Paris, 1867; and at the "GREAT INDUSTRIAL EXHIBITION," at Altona, in 1869.

BICKFORD, SMITH, AND CO., of TUCKINGMILL, CORNWALL, MANUFACTURERS of PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—
EVERY COIL of FUSE MANUFACTURED by them has TWO SEPARATE THREADS PASSING THROUGH the COLUMN of GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as THEIR TRADE MARK.



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Titanic Steel and Iron Company

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SOLE MANUFACTURERS OF MUSHET'S
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"R. MUSHET'S SPECIAL STEEL," for LATHE and PLANING TOOLS (N.B.—This Steel requires no hardening after being forged).

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PUMP LEATHER
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By a special method of preparation, this leather is made solid, perfectly close in texture, and impermeable to water; it has, therefore, all the qualifications essential for pump buckets, and is the most durable material of which they can be made. It may be had of all dealers in leather, and of
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AWARDED TWENTY GOLD AND SILVER FIRST-CLASS PRIZE MEDALS.

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TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, McADAM ROAD MAKERS, &c., &c.

BLAKE'S PATENT STONE BREAKER,

OR ORE-CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

This is the only machine that has proved a success. This machine was shown in full operation at the Royal Agricultural Society's Show at Manchester, and at the Highland Agricultural Society's Show at Edinburgh, where it broke 1¼ ton of the hardest trap or winstone in eight minutes, and was AWARDED TWO FIRST-CLASS SILVER MEDALS.
It has also just received a SPECIAL GOLD MEDAL at Santiago, Chili.

It is rapidly making its way to all parts of the Globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States, and England. Read extracts of testimonials:—

The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last 12 months, and Capt. Morcom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour.
For the Parys Mining Company,
H. R. Marsden, Esq. JAMES WILLIAMS.

Eton Emery Works, Manchester.—We have used Blake's patent stone breaker made by you for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaws about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery.
H. R. Marsden, Esq. THOS. GOLDSWORTHY & SONS.

Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly.—The stone breaker does its work admirably, crushing the hardest stone and quartz. WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard winstone in 20 minutes, for fine road metal, free from dust.
Messrs. ORD and MADDISON,
Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton.
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General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or $75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered a third machine for this estate. SILAS WILLIAMS.

Your stone breaker gives us great satisfaction. We have broken 101 tons of Spanish pyrites with it in seven hours.
H. R. Marsden, Esq. EDWARD AARON,
Weston, near Runcorn.

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"NE PLUS ULTRA" RESPIRATOR,

FOR

Coal Mines, Fire Brigades, Gas Companies, Breweries, Foul Wells, Chemical Works, Steam Ships, &c., &c.

This NEW RESPIRATOR is offered to the public as an INVALUABLE MEANS for SAVING LIFE and PROPERTY.

CERTIFICATE.

"I have used it successfully at several fires, and can with confidence recommend it as one of the most useful inventions that has ever been discovered to assist firemen in the discharge of their duties.
(Signed) *ALFRED TOZER,*
Superintendent Fire Brigade, Manchester."

PRICES:—No. 1, £8 8s.; No. 2, £9 9s.; No. 3, £10 10s. Goggles for firemen 10s. each extra. Lamps for collieries extra.

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ALLOWED TO ENGINEERS, AGENTS, AND OTHERS FOR INTRODUCING

THE PATENT DON LUBRICATING OIL

TO THEIR FRIENDS AND CUSTOMERS.

It is quite as good and durable a lubricant as the best, and is little more than half the price of the common kinds. While there is no more serviceable or economical Oil for Engines and Machinery, it is the best known lubricant of the axles of Railway Trucks and Carriages, and it may be applied in the ordinary grease boxes, at a saving of one-half over grease. Particulars forwarded on application.

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From JAMES NASMYTH, Esq., the Inventor of the Steam-Hammer.
"I am highly pleased with it as a most effective and durable lubricator."

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"I find its lubricating qualities effective and durable."

From DUBS AND CO., Glasgow Locomotive Works.
"We find it a good lubricating oil, and very cheap."

From JOHN HARTOP, Esq., Manager for Earl Fitzwilliam, Elsecar.
"The oil answers my purpose well."

From Messrs. RICHARD EVANS AND CO., Haydock Collieries.
"It answers quite as well as yellow grease (for railway wagons), and at a saving of forty-eight per cent."

From THOMAS EMMERSON FORSTER, Esq., Mining Engineer, Newcastle
"I find a saving upon four locomotives of £60 per annum."

From the LANCASHIRE AND YORKSHIRE RAILWAY.
"It kept the (fan) shaft perfectly cool, and with a less quantity."

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"Having fully tested its merits, I find it equal to the best lubricating oil I have ever used."

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"We are glad to say that it suits us admirably, and it gives us better results, at less expense, than other oils."

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"The men were rather against it at first, but have now, by experience, learned to appreciate its good qualities. It answers our purpose so completely that we shall continue to use it and no other."

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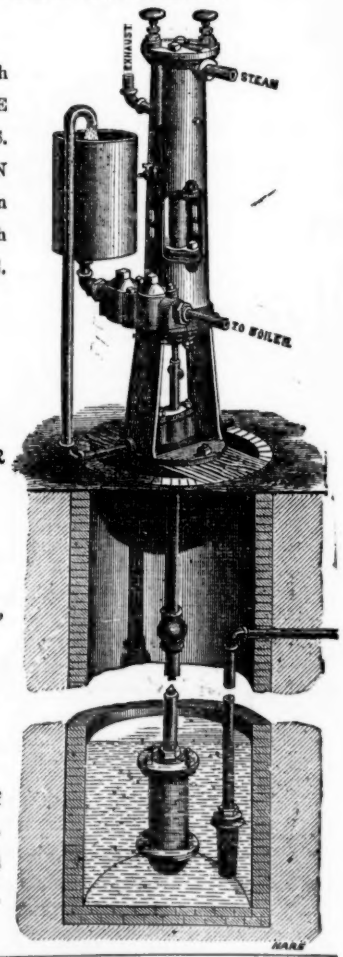
THESE PUMPS, which have no fly-wheel, ARE ADAPTED to DEEP LIFTS. They are PERFECT IN THEIR ACTION, and can be RECOMMENDED with the utmost CONFIDENCE.



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WONDERFUL MEDICAL DISCOVERY,
Showing the true causes of Nervous, Mental, and Physical Debility, Lowness of Spirits, Indigestion, WANT OF ENERGY, PREMATURE DECLINE, with plain directions for PERFECT RESTORATION TO HEALTH AND VIGOUR IN A FEW DAYS.
The most important fact that these alarming complaints may easily be removed
WITHOUT MEDICINE
Is here clearly demonstrated, and the entirely new and highly successful treatment, as adopted by the author, fully explained, by means of which
EVERYONE IS ENABLED TO CURE HIMSELF
Perfectly, and at the least possible cost.
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IN THE MATTER OF THE COMPANIES ACTS, 1862 AND 1867, AND THE PARYS MINES COMPANY (LIMITED).

IN LIQUIDATION.

NOTICE IS HEREBY GIVEN, that ALL CREDITORS and other persons having any CLAIMS upon or against the PARYS MINES COMPANY (LIMITED), now in liquidation, are REQUIRED to SEND PARTICULARS of their DEBTS or CLAIMS to the undersigned liquidators on or before the 24th day of December next, after which time the said liquidators will PROCEED to DISTRIBUTE the ASSETS of the company among the parties entitled thereto, having reference only to the debts or claims of which they have then notice, and that the liquidators will not thereafter be liable for such assets, or any part thereof, to any person of whose debt or claims they shall not then have notice.

JOHN TAYLOR,
RICHARD TAYLOR, } Liquidators, 6, Queen-street-place, London.

Dated the 15th November, 1870.

GREAT WEST CHIVERTON MINE COMPANY (LIMITED).

Notice is hereby given, than an EXTRAORDINARY GENERAL MEETING of the Shareholders in the Great West Chiverton Mine Company (Limited) will be HELD at the company's office, 9, Dowgate-hill, in the City of London, on THURSDAY, the 24th of November instant, at Twelve o'clock at noon precisely, to take into consideration the following proposals, and to pass resolutions thereon :—

To alter the Fourth and Fifth Clauses of the Articles of Association by substituting the word "two" for the word "ten," in the last line of the former, and the seventh line of the latter.

To reduce the qualification for the office of director from 100 shares to 10 shares.

To alter the Fourteenth Clause of the Articles of Association, by substituting in the third and fourth lines thereof "once in the *Mining Journal*, and once in the *Times* newspapers," for "twice in four London newspapers."

To alter the Articles of Association by omitting the whole of the Seventeenth and Eighteenth Clauses therefrom.

To insert in the Articles of Association a clause enabling the directors to borrow money on security of the company's property.

To alter the Forty-ninth Clause of the Articles of Association, by empowering the directors to appoint any person, whether one of their own body or not, manager of the company.

And Notice is hereby further given, that a GENERAL MEETING of the Shareholders of the said company will be held at the same place, immediately after the said Extraordinary Meeting, for general purposes.

By order of the Board,
JOHN BROADBENT, JUN., Secretary.

9, Dowgate-hill, London, November 10, 1870.

THE WORTHING MINING COMPANY (LIMITED).

Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders of this company will be HELD at 63, Bishopsgate-street Within, in the City of London, on THURSDAY, the 1st day of December, 1870, at Two o'clock precisely, and that the following resolutions will be submitted for the consideration and approval of the shareholders of such meeting.

1.—That the resolution passed at the extraordinary meeting, held on the 15th day of November, 1870—"That the company be wound-up voluntarily under the provisions of the Companies Act, 1862," be and the same is hereby confirmed.

2.—That the resolution passed at the same meeting, "That Cyrus Legg, Chairman of the company, and Henry Rendall Wotton, M.D., Deputy-Chairman, be appointed liquidators, for the purposes of such winding-up, and the said liquidators be and they are hereby authorised to deal with the property of the company, by sale or otherwise, in such manner in all respects as they may deem expedient," be and the same is hereby confirmed.

By order of the Board,

London, Nov. 16, 1870. W. J. LAVINGTON, Secretary.

IRON AND COAL COMPANIES.

Shares.	Company.	Paid.	Price.
£100	John Abbot and Co. [L.]	£ 75 0 0	20 15 dis.
50	Blaenavon Iron and Steel Co. [L.]	7 10 0	—
100	Bolckow, Vaughan, and Co. [L.]	30 0 0	33 34 pm.
100	Brown, John, and Co. [L.]	70 0 0	par 2 dis.
10	Consett Iron Co. [L.]	7 10 0	4 4½ pm.
100	Cammell and Co. [L.]	80 0 0	15 13 dis.
32	Ebbw Vale Co. [L.]	27 10 0	8¼ 8 dis.
20	General Mining Association [L.]	20 0 0	3 5
15	Hopkins, Gilkes, and Co. [L.]	10 0 0	⅜ ⅝ dis.
10	Ironmasters' Company [L.]	10 0 0	—
10	Midland Iron Co. [L.]	5 0 0	22 22½ pm.
2½	Mersey Steel and Iron Co. [L.]	11 10 0	8⅛ 7⅞ dis.
4	Mwyndy Iron Ore Co. [L.]	3 10 0	2⅛ 2 dis.
1	Nerbudda Coal and Iron	0 7 0	par. ⅛ pm.
35	Palmer's Shipbuilding and Iron Co. [L.]	25 0 0	1¼ ¾ dis.
35	Ditto ditto	35 0 0	1¼ ¾ dis.
100	Parkgate Iron Co. [L.]	65 0 0	8 6 dis.
20	Patent Shaft and Axletree Co. [L.]	10 0 0	5¼ — pm.
50	Rhymney Iron Co. [L.]	50 0 0	21 19 dis.
15	Ditto New	15 0 0	6½ 5¼ dis.
50	Shotts Iron Co.	50 0 0	18 17 dis.
100	Sheepbridge Iron and Coal Co. [L.]	55 0 0	16 15 dis.
100	Staveley Iron and Coal Co.	60 0 0	39 41 pm.
100	Ditto ditto New	10 0 0	7 9 pm.
100	Thames Iron Company	100 0 0	—
7½	Titanic Iron and Steel	5 0 0	—
100	Vancouver Coal [L.]	6 0 0	par. 1 pm.
10	Van Iron Ore [L.]	10 0 0	—
100	Wigan Coal and Iron Co	100 0 0	10 8 dis.
75	Ditto ditto	75 0 0	10 8 dis.

THE MINING SHARE LIST

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
1500	Alderley Edge, c, Cheshire*	10 0 0	—		10 6 8	0 5 0	Jan. 1869
6000	Boscaswell, t, c, St. Just	1 0 0	—		0 2 0	0 2 0	Apr. 1870
200	Botallack, t, c, St. Just	91 5 0	215	215 220	585 5 0	5 0 0	Nov. 1870
20000	Bronfloyd, l, Cardigan*	2 10 0	2¾	2¼ 2¾	2 19 0	0 1 0	Oct. 1870
4000	Brookwood, c, Buckfastleigh	1 16 0	—		0 15 0	0 2 6	Nov. 1870
5094	Bwlch Consols, s-l, Cardigan*	4 0 0	3	2½ 3	0 9 0	0 2 0	May 1870
6400	Cashwell, l, Cumberland*	2 10 0	—		0 12 6	0 3 6	Sept. 1870
916	Cargoll, s-l, Newlyn	16 5 7	1⅜	1¼ 1⅜	16 15 0	0 10 0	Aug. 1869
1280	Chanticleer, l, Flint	0 7 8	—		0 1 0	0 0 6	Nov. 1868
2450	Cook's Kitchen, c, Illogan‡	19 14 9	19½	17 18	4 13 0	0 10 0	Oct. 1870
867	Cwm Erfin, l, Cardiganshire*	7 10 0	—		32 8 0	0 5 0	Oct. 1870
128	Cwmystwith, l, Cardiganshire	60 0 0	—		387 10 0	2 0 0	July 1869
280	Derwent Mines, s-l, Durham	300 0 0	—		177 0 0	2 10 0	July 1868
1024	Devon Gt. Consols, c, Tavistock†	1 0 0	100	95 100	1145 0 0	4 0 0	May 1870
656	Ding Dong, t, Gulval‡	49 14 6	20	18 20	7 10 0	0 15 0	Aug. 1870
1432	Dolcoath, c, t, Camborne	32 4 6	130	127½ 130	248 2 6	3 0 0	Oct. 1870
12800	Drake Walls, t, Calstock†	2 10 0	1⅛	1¼ 1⅜	1 3 3	0 1 0	July 1870
6144	East Caradon, c, St. Cleer†	2 14 6	5	4½ 5	14 11 6	0 2 0	July 1867
300	East Darren, l, Cardiganshire	32 0 0	—		188 10 0	2 0 0	Sept. 1870
6400	East Pool, t, c, Pool, Illogan	0 9 9	10	10½ 11	10 17 3	0 5 0	Nov. 1870
1906	East Wheal Lovell, t, Wendron	3 9 0	27	26½ 27	14 16 0	2 0 0	Nov. 1870
2800	Foxdale, l, Isle of Man*	25 0 0	—		76 15 0	1 0 0	Oct. 1870
5000	Frank Mills, l, Christow	3 18 6	1¾	1¾ 2	4 8 0	0 2 6	Aug. 1870
3950	Gawton, c, Tavistock	3 10 6	—		0 3 0	0 3 0	Jan. 1868
15000	Great Laxey, l, Isle of Man*	4 0 0	18	17¾ 18¼	13 1 0	0 8 0	Sept. 1870
3000	Great Northern Manganese*	5 0 0	—		—	5 p.ct.	Feb. 1869
5908	Great Wheal Vor, t, c, Helston†	40 0 0	5½	5 5½	15 12 0	0 3 6	June 1870
10240	Gunnislake (Clitters'), t, c	4 19 0	—		0 2 0	0 1 0	Nov. 1870
1024	Herodsfoot, l, near Liskeard†	8 10 0	45	41 43	54 0 0	1 10 0	Oct. 1870
2000	Holmbush and Kelly Bray, c*	1 0 0	—		0 3 0	0 1 0	Nov. 1869
10000	Killaloe, sl, Tipperary	1 0 0	¾	¾ ⅞	0 7 0	0 0 7	Mar. 1870
165	Levant, c, t, St. Just	10 8 1	—		1101 0 0	2 0 0	Aug. 1869
400	Lisburne, l, Cardiganshire	18 15 0	—		529 0 0	2 0 0	Jan. 1870
3000	Maes-y-Safn, l, Flint*	20 0 0	—		4 0 0	0 5 0	Oct. 1868
9000	Marke Valley, c, Caradon	4 10 6	6⅜	6⅜ 6⅝	6 10 0	0 4 0	Oct. 1870
1800	Minera Mining Co. l, Wrexham*	25 0 0	170	160 170	282 3 3	4 0 0	Nov. 1870
20000	Mining Co. of Ireland, c, l, cl	7 0 0	8	8 8½	0 4 6½	0 2 1	July 1870
6400	New Pembroke, t, c, Par Station	5 0 0	5	5 5½	0 5 0	0 2 6	Nov. 1870
2000	North Levant, t, c, St. Just	10 12 0	11½	11½ 12	1 15 0	0 10 0	Aug. 1870
5610	North Wheal Crofty, c, Illogan†	3 11 3	2	1⅜ 1⅝	0 4 0	0 1 6	Oct. 1870
256	Pendarves United, t, c, Camb.	86 0 0	65	60 65	15 0 0	5 0 0	Nov. 1870
5000	Penhalls, t, St. Agnes	3 0 0	—		1 13 6	0 4 0	Oct. 1870
500	Phœnix, t, c, Linkinhorne	50 0 0	—		456 10 0	7 0 0	May 1870
2000	Poldice, t, c, Gwennap	10 0 0	—		1 10 0	0 10 0	Oct. 1870
12800	Prince of Wales, c, Calstock	0 12 6	⅝	½ ⅝	0 10 6	0 1 0	Nov. 1869
1120	Providence, t, Uny Lelant†	10 6 7	39	39 41	99 12 6	1 0 0	Sept. 1870
15000	Queen, s, c, Calstock*	0 10 0	—		0 1 0	0 1 0	Sept. 1870
5869	Rosewall Hill & Ransom, t	4 0 0	1⅛	1¼ 1⅜	0 11 6	0 1 6	June 1870
512	South Caradon, c, St. Cleer†	1 5 0	250	230 250	651 10 0	4 0 0	Sept. 1870
6000	South Darren, l, Cardigan*	3 6 6	—		1 0 0	0 2 6	Nov. 1869
937	South Wh. Crofty, c, Illogan	24 10 10	7	6 7	3 0 0	0 10 0	June 1870
496	So. Wh. Frances, c, Illog.†	18 18 9	20	26 28	374 13 6	1 0 0	Mar. 1868
242	Spearn Moor, t, St. Just	36 17 9	19	18 20	14 15 0	1 0 0	Oct. 1870
940	St. Ives Consols, t, St. Ives	10 15 0	—		0 10 0	0 10 0	May 1869
8771	St. Just Amalgamated, t*	3 10 0	—		0 2 6	0 2 6	Nov. 1869
508	Summer Hill, l, Mold	3 18 6	—		2 5 6	0 5 0	Feb. 1868
12000	Tankerville, l, Salop*	6 0 0	14	14 14½	0 10 0	0 5 0	Oct. 1870
6000	Tincroft, c, t, Pool, Illogan†	9 0 0	48	43 45	25 18 6	1 10 0	Sept. 1870
2000	Trumpet Cons., t, Helston	11 10 0	22	21 23	11 12 0	0 15 0	Aug. 1870
12000	Van, l, Llanidloes*	4 5 0	60	57¼ 62½	2 15 0	0 15 0	Sept. 1870
3000	W. Chiverton, l, Perranzabuloe†	10 0 0	54	53 54	45 7 6	2 0 0	Aug. 1870
512	West Wheal Frances, t, Illogan	106 15 0	35	34 36	4 10 0	1 10 0	Oct. 1869
400	W. Wheal Seton, c, Camborne†	47 0 0	125	120 125	666 10 0	3 10 0	Oct. 1870
512	Wheal Basset, c, Illogan†	5 2 6	75	65 75	632 10 0	1 0 0	June 1868
512	Wheal Jane, s-l, Kea	10 15 0	60	55 60	32 0 0	1 10 0	July 1870
4295	Wheal Kitty, t, St. Agnes	5 4 6	9¼	8¼ 8¾	5 13 0	0 7 0	Nov. 1870
1024	Wheal Kitty, t, Uny Lelant†	3 10 6	11	9 11	12 12 6	0 10 0	July 1870
896	Wheal Margaret, t, Uny Lelant	13 17 6	7	5 7	78 5 0	0 10 0	Aug. 1870
1024	Wheal Mary Ann, l, Menheniot†	8 0 0	8	8 9	71 7 6	0 10 0	Sept. 1870
1000	Wh. Mary Hutchins, Plymp., t	2 12 6	—		0 10 0	0 5 0	Aug. 1869
80	Wheal Owles, t, St. Just‡	70 0 0	—		464 13 0	12 10 0	Aug. 1870
396	Wheal Seton, t, c, Camborne	60 0 0	40	32½ 35	254 15 0	2 0 0	Feb. 1869
17000	Wicklow, c, s, Wicklow	2 10 0	..	8 8½	50 3 0	0 5 0	Sept. 1869

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
35000	Alamillos, l, Spain*†	2 0 0	2¼	1¾ 2¼	0 13 0	0 2 6	Oct. 1870
130000	Almada&TiritoConsolidated, s*†	1 0 0	1	⅞ 1⅛	0 1 6	0 1 6	Oct. 1870
20000	Australian, c, South Australia†	7 7 6	—		0 1 6	0 0 6	Aug. 1868
15000	Cape Copper Mining*†	7 0 0	15	14½ 15½	5 17 6	0 10 0	May 1870
30000	Central American Association*†	0 15 0	—		0 6 0	0 1 0	July 1869
21000	Colorado Terrible, s-l, Colorado*†	5 0 0	4¼	4 4½	0 2 6	0 2 6	Nov. 1870
10000	Copiapo Mining Co., Chili†‡	16 10 0	3	2 3	0 4 0	0 4 0	April 1869
76162	Don Pedro North del Rey*†	0 14 0	2⅞	2 2¼	2 3 9	0 4 0	Mar. 1870
70000	English and Australian, c‡	2 10 0	—		—	0 0 9	Feb. 1869
25000	Fortuna, l, Spain*†	2 0 0	2¾	2¼ 2¾	2 2 10	0 2 0	Oct. 1870
10000	Gonnesa, l, Sardinia*	5 0 0	—		10 per cent.		Aug. 1868
68000	Kapunda Mining Co., Austra†.	1 0 0	⅜	⅛ ⅜	0 1 10	0 0 6	Nov. 1868
15000	Linares, l, Spain*†	3 0 0	3¾	3¼ 3¾	12 13 4	0 5 0	Oct. 1870
50000	Panulcillo, c, Chili*†	4 0 0	2½	2 2½	10 per cent.		Yearly.
10000	Pontgibaud, s-l, France†	20 0 0	17	16 17	7 1 8	1 15 6	Nov. 1869
100000	Port Phillip, g Clunes*†	1 0 0	1⅛	1 1⅛	1 6 0	0 1 6	Jan. 1870
120000	Scottish Australian Min. Co.†	1 0 0	—		6 per cent.		Apr. 1870
11000	St. John del Rey, Brazil*†	15 0 0	25	23 25	81 10 0	4 5 0	Dec. 1867
15000	Sweetland Creek, g, California*†	4 0 0	3	2¾ 3¼	0 8 0	0 4 0	Nov. 1870
50000	Victoria (London) [25000 £1 pd., 25000 12s. 6d. pd.]				0 9 7	0 0 7	July 1868

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
50000	Anglo-Argentine, g, s, Argentine Republic*†	1 0 0	⅞	½ ¾	Fully pd.
20000	Anglo-Australian, g, Victoria* (£2 10s. shares)	1 0 0	—		Jan. 1870
100000	Anglo-Brazilian, g*†	0 12 0	—		Nov. 1869
12500	Anglo-Italian, g*†	1 7 6	—		Jan. 1868
20000	Arivaca, g, s, Arizona* (£10 shares)	2 10 0	—		Oct. 1870
20000	Australian United, g, Victoria*†	2 10 0	⅜	¼ ¾	Fully pd
30000	Bellavista, s, Peru* (£1 shares)	0 15 0	—		Oct. 1870
50000	Braganza, g, Brazil*	0 15 0	—		Oct. 1870
20000	Capula, s, Mexico*†	2 0 0	1	½ 1	Fully pd.
30000	Chontales, g, s, Nicaragua*†	5 0 0	¾	½ ¾	Mar. 1868
100000	Cuiaba, g, Minas Geraes, Brazil	0 10 0	—		June 1870
20000	Eberhardt and Aurora, s, Nevada*	10 0 0	—	13¼ 13¾	Fully pd.
100000	Eclipse, g, California* (£1 shares)	0 15 0	⅝	½ ¾	Fully pd.
15000	El Chico Silver Mining and Reduction Company*	5 0 0	—		Nov. 1866
40000	Fortune Copper Mining Co. of Western Australia	2 0 0	—		Fully pd.
50000	Frontino and Bolivia, g, New Granada*†	1 18 0	⅜	⅛	Nov. 1869
150000	General Brazilian, g* (£1 shares)	0 17 0	⅜	⅛ ⅜	Oct. 1870
25000	Guerrero, g, Mexico (total cap.=50,000 shares of £1)	0 10 0	—		Aug. 1869
100000	Imperial Ottoman, s-l, Turkey*	1 0 0	—		Fully pd.
50000	Javali, g, Nicaragua	2 0 0	—		Jan. 1869
7927	Lusitanian (Portugal)†‡ (£5 shares)	3 0 0	¾	¼ ¾	Dec. 1866
51000	New Quebrada, c, Venezuela*†	5 0 0	—		Fully pd.
50000	New Rosario, s, Mexico	1 0 0	—		Fully pd.
15000	Pacific, g, s, Nevada and California* (and reduced)	7 0 0	1¾	1 1½	Fully pd.
80000	Pestarena United, g, Italy*†	3 0 0	—		Fully pd.
100000	Rossa Grande, g, Brazil*† (£1 shares)	0 15 0	⅜	⅛ ⅜	Sept. 1870
50000	Sao Vicente, Brazil*†	0 6 0	—		Oct. 1868
112500	Sierra Battes, g, California*	2 0 0	—		Fully pd.
60000	South Aurora, s, White Pine, Nevada*	5 0 0	5⅛	5¼ 5¾	Fully pd.
100000	Taquaril, g, Brazil* (£1 shares)	0 13 0	2⅜	2⅜ 2¾	Sept. 1870
40000	Tuolumne, g, California*	2 0 0	—		Fully pd
43174	United Mexican, s, Mexico†‡*	28 5 2	3	2 3	May 1868
30000	Val Antigoria, g, Italy*	1 12 6	—		Dec. 1869
80000	Worthing, c, South Australia*†	1 0 0	—		Fully pd.
75000	Yorke Peninsula, c, South Australia	1 0 0	½	¼ ½	Fully pd.
45000	Yudanamutana, c, South Australia*†‡	3 0 0	1⅛	⅝ ⅞	Fully pd.

NON-DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
12000	Assheton, l*, Carnarvonshire	5 0 0	5	3 4	Fully pd.
12000	Cae Gynon, l, Cardiganshire*†	2 0 0	1	½ 1¼	Fully pd.
1000	Carn Brea, c, t, Illogan‡	30 0 0	15	13 15	June 1868
3000	Chiverton, l, Perranzabuloe	11 5 0	1¼	1 1½	Oct. 1870
3000	Chiverton Moor, l, Perranzabuloe	7 11 0	3	2½ 3	Feb. 1869
3000	Chiverton Valley, l, Perranzabuloe	3 7 6	3	2¾ 3	Aug. 1870
32700	Conroy, l, Montgomeryshire*	3 0 0	—		Oct. 1670
512	East Basset, c, Redruth†‡	40 0 0	3	2 3	Mar. 1870
6000	East Grenville, c, Camborne	4 13 0	2¾	2½ 3	Aug. 1870
1200	Fedw, l, Llanidloes*	9 0 0	—		July 1870
3000	Florida, s-l, Cardiganshire*	3 0 0	3	2½ 3	Fully pd.
5000	Gorsedd and Celyn Level, l, Flintshire	2 0 0	—		Fully pd.
6000	Hingston Down, c, Calstock†	6 4 0	¾	½ ⅝	Aug. 1870
400	New Wheal Seton, c, Camborne	70 0 0	—		Dec. 1869
695	North Roskear, c, Camborne	62 19 0	7½	7 8	Aug. 1869
5936	North Treskerby, c, St. Agnes	1 16 4	—		Aug. 1869
15000	Penrhyn, l, Carnarvonshire*	2 0 0	2	2 2½	Fully pd.
12000	Plynlimmon, l, Llanidloes*	2 5 0	2¼	2¼ 2½	Sept. 1870
1024	Rose and Chiverton United, l, Newlyn	8 0 0	10		May 1870
6123	South Condurrow, t, c, Camborne	5 5 6	3⅛	2⅞ 3⅛	Oct. 1869
10000	Tan-yr-Allt, l*, Carnarvonshire	3 0 0	2¼	1⅞ 2⅛	Fully pd.
2000	Van Consols, Llanidloes, l*	2 10 0	2⅛	1⅞ 2	Fully pd.
6000	West Basset, c, Illogan†‡	2 18 0	¼	⅛ ¼	Sept. 1870
2288	West Caradon, c, St. Cleer‡‡	2 16 0	—	¾ 1	July 1870
12000	West Maria and Fortescue, c, Lamerton	3 13 0	1¾	1⅜ 1¾	July 1870
12000	West Pant-y-Go, s-l, Flint*	1 0 0	1	1 1½	June 1870
12000	West Tankerville, l, Salop	3 0 0	2¾	2¼ 2¾	July 1870
6000	Wheal Agar, c, Illogan	8 8 6	1⅞	1¾ 2	Oct. 1870
512	Wheal Buller, c, Redruth†‡	26 5 0	5	3 5	Aug. 1870
5386	Wheal Crebor, c, Tavistock	2 15 6	⅜	¼ ¾	Sept. 1870
5724	Wheal Grenville, c, Camborne†	10 11 0	2	2⅛ 2⅜	Dec. 1869
4096	Wheal Uny, t, c, Redruth	10 14 6	2¾	2¾ 3	Oct. 1869

NON-DIVIDEND MINES

Shares.	Mines.	Paid.
12800	Aberdaunant, l, Llanidloes*	5 0 0
4000	Bedford Consols, c, Tavistock	3 2 6
4000	Bedford United, c, Tavist.*	3 16 2
20000	Blaen Caelan,* s-l, Cardig.	1 0 0
5000	Blue Hills, t, c, St. Agnes	1 7 0
25000	Brynambor, l, Cardigan	0 10 0
1200	Bryn Gwyn, l, Mold*‡	9 0 0
20000	Brynpostig, Montgomery, l*	1 0 0
7500	Brynystwith, l, Cardigan*	2 0 0
6000	Budnick Consols, t, Perranz.	0 14 4
6000	Bwadrain Cons., s-l, Cardig.	3 5 0
30000	Caldbeck Fells, l, Cumberld.*	1 17 6
5000	Capel Banhaglog, l, Mont.*	3 0 0
910	Caradon Consols, c, St. Cleer	33 16 0
6400	Cardigan Bay, s-l, Aberyst.	5 0 0
6000	Carn Camborne, c, Cambrn.	3 2 6
3000	Cefn Brwyno (lim. to £5)	3 0 0
6000	Cefn Consols, l, Flintshire*	5 0 0
3000	Chiverton Wheal Virgin, l*	0 5 0
256	Condurrow, c, t, Camborne‡	76 10 0
1055	Craddock Moor, c, St. Cleer‡	15 8 0
50000	Crenver & Wheal Abraham*	2 0 0
4000	Cwm Ricket, l, Montgom.	2 15 0
4000	Devon & Cornwall United	6 6 0
5000	Dolwen, l, Cardiganshire	0 10 0
30000	Dyliffe Consols, s-l, Mont.	1 0 0
2586	East Bottle Hill, Plymp., t, c	1 6 6
6000	East Carn Brea, c, Redruth‡	6 3 6
4000	East Chiverton, l, Perranz.	3 18 0
4000	E. Gunnislake & S. Bed. c.	12 0 0
2048	East Harptree, l, Mendips*	1 10 0
10000	East Parys U., l, c, Anglesea	2 0 0
350	East Plynlimmon, l, Llanid.*	15 0 0
3640	East Providence, t, Lelant	7 6 9
5610	East Seton, c, Camborne	1 10 0
6000	East Wh. Reeth, Uny Lelant	1 8 8
12800	Excelsior, t, c, Stoke Climsld.	0 3 6
5000	Exmouth, s-l, Christow	0 6 6
12800	Florence and Tonkin United	0 3 6
6000	Gen. Min. Co. for Ireland	7 0 0
12500	Gilfach, s-l, Llangardock*	2 0 0
40000	Glasgow Caradon, c* [30,000 £1 p., 10,000	
5700	Goginan, Cardigan, l	12 10 0
6144	Gonamena, c, St. Cleer	8 3 3
5000	Gorn, l, Llanidloes	0 17 6
4096	Great Caradon, c, St. Ive	4 17 6
12500	Gt. N. Laxey (Isle of Man)*	1 0 0
3035	Gt. Retallack, s-l, b, Perran.	3 8 0
3000	Great Rock, l, Corwen*	4 5 0
4096	Great Royalton, t, Roche	0 18 0
6000	Gt. S. Chiverton, s-l, Perranz	2 15 0
5143	Great S. Tolgus, c, Redruth	2 5 6
12000	Great West Chiverton, s-l	2 10 0
6000	Great Western, t, c, Breage	2 0 0
1798	Gt. Wh. Fortune, t, Breage	31 7 4
4096	Gt. Wh. Lovell, t, Wendron	1 0 0
12000	Gwydyr Park, l, Llanrwst*	1 5 6
6000	Hammett, t, St. Neots	1 4 0
6000	Harewood Consols	0 7 0
1000	Hemerdon U., t, Plympton	1 0 0
6000	Hobb's Hill, t, St. Neot	0 1 8
6400	Holyfield, l, Cumberland*	1 0 0
962	Leeds and St. Aubyn, t, s	23 4 2
30000	Lisburne Cons. s-l, Cardigan*	1 0 0
5000	Llanarmon, Denbigh	2 0 0
20000	Llywernog, l, Cardiganshire	1 0 0
5120	Lovell, t, Wendron	0 3 0
5120	Lovell Consols, Wendron, t.	0 10 8
4662	Minera Union, l [2500 £4 p., 2162 £2 15s.	
3000	Mineral Bottom, s-l, Perranz	5 10 0
6000	Mold, s-l, Flintshire*	5 0 0
6144	Nangiles, t, c, Kea	7 0 11
12000	Nanteos Consols, l, Cardigan*	1 0 0
4000	Nanty, l, Montgomeryshire*	1 0 0
10000	New Beldon, l, Northumb.*	0 10 0
6000	New Brynpostig, l, Llanid.	2 0 0
12000	New Central Snailbeach	1 0 0
6000	New Clifford, c, Gwennap*	3 15 0
6250	N. Crow Hill, l, St. Stephen.	3 15 6
20000	New Grassington, l, York.*	1 0 0
12000	New Trelawny, s, l, St. Ives.	0 5 0
14000	New Victoria, c, Ashburton*	1 0 0
3000	N. Wh. Charlotte, t, c, St. Agnes	1 0 0
4000	New Wh. Grylls, l, Perranz.	0 10 0
4096	New Wh. Lovell, t, Wendron	3 4 6
12000	New Wh. Speedwell, c, t, l*	1 0 0
2000	N. Wh. Towan, c, t, Wendron	1 10 0
6000	North Cornwall Kaolin*	0 5 0
6000	No. Dolcoath, c, Camborne	4 3 0
3457	North Downs, c, Redruth	5 17 10
6000	North Jane, t, s-l, Kenwyn	5 1 0
1000	North Lovell, t, Wendron	5 0 0
5000	North Pool, c, Illogan	4 10 0
12000	North Tankerville, l, Salop	1 0 0
3000	N. Wh. Chiverton, l, Perran.	5 0 0
10000	North Wheal Neptune, c, t	0 5 0
12000	Ohio Crown, l, Isle of Man*	0 12 0
12288	Okel Tor, c, Calstock	2 7 6
8000	Old Gunnislake, c, Calstock	3 9 6
20000	Old Treburgett, s-l, Cornwall	1 0 0
6400	Par Consols, c, St. Blazey†‡	2 14 6
5694	Pedn-an-drea, t, Redruth	8 2 0
20000	Pen'Allt, l, Carnarvonshire	2 0 0
5000	Pendeen Consols, c, St. Just	8 4 0
1857	Penhale Wh. Vor, t, c, Helston	10 0 0
12000	Perkins Beach, l, Salop	1 0 0
6000	Perran Consols, l, Perran	2 0 6
3000	Perran Wheal Virgin	0 10 0
1772	Polberro, t, St. Agnes	15 0 0
2000	Polbreen, t, St. Agnes	3 15 0
2000	Powell United, s-l, Cardig.*	5 0 0
6000	Prince Royal, t, St. Agnes	1 5 0
12800	Princess of Wales, c, t	0 11 0
3877	Redmoor, c, t, Callington	2 5 0
5000	Reperry Mine, t, c, Lanivet	1 10 0
12000	Rhydtalog, s-l, Cardiganshire	1 0 0
6000	Roaring Water, c, Ireland	3 0 0
3000	Roche Consols, Roche	0 11 6
10000	Royalton, t, St. Columb	1 8 0
512	South Basset, c, Gwennap	30 10 0
1000	South Bwadrain, l, Cardig.	1 0 0
8000	South Cardigan, l, Cardigan.	5 0 0
5000	South Carn Brea, c, t	1 6 6
8000	So. Chiverton, s, l, Perranz.	6 2 6
6000	South Grenville, c, Camb.	0 2 0
3395	So. Herodsfoot, l, Liskeard	5 0 0
1500	S. Merllyn, l, Flint* (£2 shrs)	1 10 0
2048	South Redmoor, c, Call.	1 0 0
5000	South St. Just, t	2 0 0
3000	South Ward, l, Beerferris	0 15 0
236	Spearne Consols, t, St. Just	4 4 4
7000	Stiperstones, l, Salop*	7 0 0
6000	TamarValley, s-l, Beeralston	1 5 0
4000	Teign Valley, l, bar., Bridford	1 0 0
25000	Terras Tin Mine, St. Austell*	1 0 0
3500	Tin Hill, t, St. Austell	1 12 0
6000	Tin Valley, St. Neot	1 3 6
548	Trelyon Consols, t, St. Ives	17 5 0
459	Tresavean and Trethurrup	22 11 0
2048	Trevarrack, t, c, Uny Lelant.	2 0 0
10000	Treveddoe, t, c, Warleggan	1 10 0
4096	Trewetha, s-l, Menheniot	11 14 6
70	Tygwyn, l, Cardiganshire	25 0 0
1000	Vaughan, s-l, Cardigan	2 0 0
15000	Virtuous Lady, c, Tavistock*	1 0 0
25000	Vron United, s-l, Cardigan	1 0 0
1000	West Cwm Erfin, s-l	0 10 0
256	West Damsel, c, Gwennap	40 10 0
12800	W. Drake Walls, c, Calstock	0 11 0
6000	West Esgair Lle, l, Cardig.*	2 0 0
5000	W. Godolphin, t, c, Breage†‡	0 11 0
2582	West Great Work, t, Breage	6 11 0
10000	West Jewell, t, Gwennap*	2 0 0
16	W. Margaret, t, Uny Lelant.	65 0 0
100	West Nant-y-Cria, l, Cardig.	10 0 0
12800	West Prince of Wales, c	0 16 6
12000	West Rhoswyddol, l, Mont.*	1 0 0
838	West Rose Down, c, Linking.	26 10 0
3535	West St. Ives, t, c, St. Ives	0 10 0
2000	West Stiperstones, l, Salop*	1 0 0
512	West Tolgus, c, Redruth	66 0 0
5000	West Wh. Kitty, t, St. Agnes	3 14 0
3584	W. Wh. Tremayne, St. Erth	1 5 0
741	Wheal Basset and Grylls, t	7 18 6
5609	Wh. Courtenay, c, Tavistock	1 0 6
811	Wh. Emily Henrietta, c, Illo.	23 5 0
6000	Wheal Franco Consols, t, c	0 4 0
6000	Wheal Ida, s-l, St. Ive	1 13 0
4568	Wheal Sparnon, c, Redruth	4 0 0
1920	Wh. Trannack, c, Sithney	13 3 3
6240	Wh. Trelawny, s-l, Liskeard†	2 13 6
400	Wye, l, Llanidloes*	18 10 0

b, blende; *cl*, coal; *c*, copper; *g*, gold; *l*, lead; *s*, silver; *sl*, slate; *s-l*, silver-lead; *t*, tin; *z*, zinc.

, Companies marked thus * have been incorporated with Limited Liability; those marked † have been admitted on the Stock Exchange, those marked thus ‡ have paid Dividends.

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